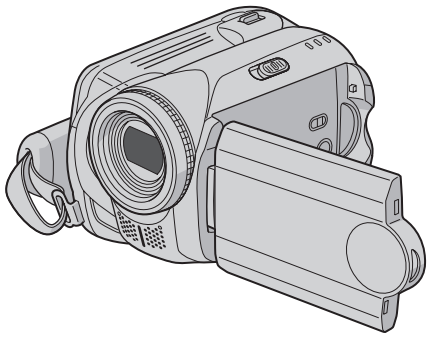
JVC

SERVICE MANUAL

HARD DISK CAMCORDER

GZ-MG67EX, GZ-MG67EY, GZ-MG67EZ, GZ-MG77EK, GZ-MG77EX, GZ-MG77EY, GZ-MG77EZ



GZ-MG67EXM, GZ-MG67EYM, GZ-MG67EZM [M6E635],
GZ-MG77EKM, GZ-MG77EXM,
GZ-MG77EYM, GZ-MG77EZM [M6E637]

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

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No.YF139
2006/4

SPECIFICATION

■Camcorder

For general	Power supply		DC 11.0 V (Using AC Adapter) DC 7.2 V (Using battery pack)
	Power consumption		Approx. 4.6 W
	Dimensions (W × H × D)		68 mm × 69 mm × 109 mm
	Weight		Approx. 370 g (without battery, lens cap and strap) Approx. 430 g (incl. battery, lens cap and strap)
	Operating temperature		0°C to 40°C
	Operating humidity		35% to 80%
	Storage temperature		-20°C to 50°C
	Pickup		1/3.9" (2,180,000 pixels) CCD
	Lens		F 1.2 to 2.0, f = 3.8 mm to 38 mm, 10:1 power zoom lens
	Filter diameter		Ø30.5 mm
	LCD monitor		2.7" diagonally measured, LCD panel/TFT active matrix system
	Speaker		Monaural
	Flash		Within 2 m (recommended shooting distance)
For video/audio	Format		SD-VIDEO
	Recording/Playback format	Video	MPEG-2
		Audio	Dolby Digital (2 ch)
	Signal format		PAL standard
	Recording mode (video)		ULTRA FINE: 720 × 576 pixels, 8.5 Mbps (VBR) FINE: 720 × 576 pixels, 5.5 Mbps (VBR) NORMAL: 720 × 576 pixels, 4.2 Mbps (VBR) ECONOMY: 352 × 288 pixels, 1.5 Mbps (VBR)
	Recording mode (audio)		ULTRA FINE: 48 kHz, 384 kbps FINE: 48 kHz, 384 kbps NORMAL: 48 kHz, 256 kbps ECONOMY: 48 kHz, 128 kbps
For still image	Format		JPEG
	Image size		4 modes (1632 × 1224 / 1280 × 960 / 1024 × 768 / 640 × 480)
	Picture quality		2 modes (FINE/STANDARD)
For connectors	AV	S-Video output	Y:1.0 V (p-p), 75Ω, analogue, C:0.29V (p-p), 75Ω, analogue
		Video output	1.0 V (p-p), 75 Ω, analogue
		Audio output	300 mV (rms), 1 kΩ, analogue, stereo
	USB		Mini USB type A and type B, USB 2.0 compliant

■AC Adapter

Power requirement	AC 110 V to 240 V~, 50 Hz/60 Hz
Output	DC 11 V, 1 A

■Remote Control

Power supply	DC 3 V
Battery life	Approx. 1 year (depending on the frequency of use)
Operating distance	Within 5 m
Operating temperature	0°C to 40°C
Dimensions (W × H × D)	45 mm × 13 mm × 105 mm
Weight	Approx. 40 g (incl. battery)

Design and specifications subject to change without notice.

SECTION 1
PRECAUTIONS

1.1 SAFTY PRECAUTIONS

Prior to shipment from the factory, JVC products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold.However,in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

1.1.1 Precautions during Servicing

(1) Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product.When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

(2) Parts identified by the ⚠symbol and shaded ( ) parts are critical for safety.
Replace only with specified part numbers.

NOTE :
Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

(3) Fuse replacement caution notice.
Caution for continued protection against fire hazard.
Replace only with same type and rated fuse(s) as specified.

(4) Use specified internal wiring. Note especially:
- Wires covered with PVC tubing
- Double insulated wires
- High voltage leads

(5) Use specified insulating materials for hazardous live parts. Note especially:
- Insulation Tape
- PVC tubing
- Spacers
- Insulation sheets for transistors
- Barrier

(6) When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering.

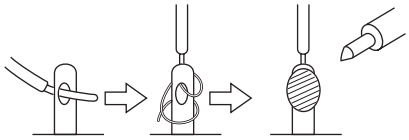


Fig.1-1-1

(7) Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

(8) Check that replaced wires do not contact sharp edged or pointed parts.

(9) When a power cord has been replaced, check that 10-15 kg of force in any direction will not loosen it.

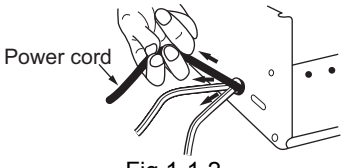


Fig.1-1-2

(10) Also check areas surrounding repaired locations.

(11) Products using cathode ray tubes (CRTs)In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the specified parts. Under no circumstances attempt to modify these circuits.Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

(12) Crimp type wire connectorIn such cases as when replacing the power transformer in sets where the connections between the power cord and power trans former primary lead wires are performed using crimp type connectors, if replacing the connectors is unavoidable, in order to prevent safety hazards, perform carefully and precisely according to the following steps.
- **Connector part number** :E03830-001
- **Required tool** : Connector crimping tool of the proper type which will not damage insulated parts.
- **Replacement procedure**

a) Remove the old connector by cutting the wires at a point close to the connector.Important : Do not reuse a connector (discard it).

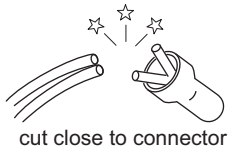


Fig.1-1-3

b) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

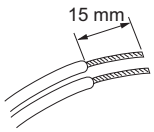


Fig.1-1-4

c) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

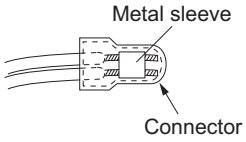


Fig.1-1-5

d) As shown in Fig.1-1-6, use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

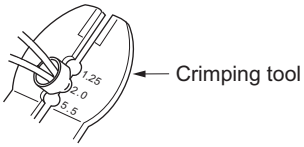


Fig.1-1-6

e) Check the four points noted in Fig.1-1-7.

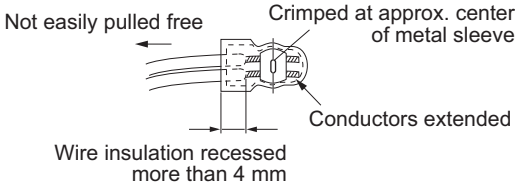

Not easily pulled free
Crimped at approx. center of metal sleeve
Conductors extended
Wire insulation recessed more than 4 mm

Fig.1-1-7

1.1.2 Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions, Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

(1) Insulation resistance test
Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).See table 1 below.

(2) Dielectric strength test
Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See Fig.1-1-11 below.

(3) Clearance distance
When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See Fig.1-1-11 below.

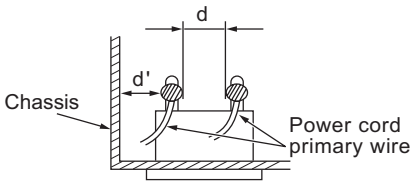


Fig.1-1-8

(4) Leakage current test
Confirm specified or lower leakage current between earth ground/power cord plug prongs and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).
Measuring Method : (Power ON)Insert load Z between earth ground/power cord plug prongs and externally exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See Fig.1-1-9 and following Fig.1-1-12.

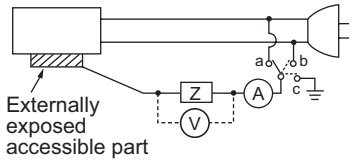
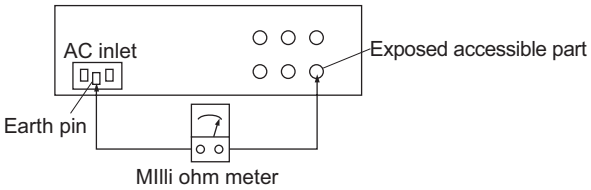


Fig.1-1-9

(5) Grounding (Class 1 model only)
Confirm specified or lower grounding impedance between earth pin in AC inlet and externally exposed accessible parts (Video in, Video out, Audio in, Audio out or Fixing screw etc.).Measuring Method:
Connect milli ohm meter between earth pin in AC inlet and exposed accessible parts. See Fig.1-1-10 and grounding specifications.



Grounding Specifications

Region	Grounding Impedance (Z)
USA & Canada	Z ≦ 0.1 ohm
Europe & Australia	Z ≦ 0.5 ohm

Fig.1-1-10

AC Line Voltage	Region	Insulation Resistance (R)	Dielectric Strength	Clearance Distance (d), (d')
100 V	Japan	R≧ 1 MΩ/500 V DC	AC 1 kV 1 minute	d, d' ≧ 3 mm
100 to 240 V			AC 1.5 kV 1 minute	d, d' ≧ 4 mm
110 to 130 V	USA & Canada	1 MΩ ≦R≦ 12 MΩ/500 V DC	AC 1 kV 1 minute	d, d' ≧ 3.2 mm
110 to 130 V 200 to 240 V	Europe & Australia	R≧ 10 MΩ/500 V DC	AC 3 kV 1 minute (Class Ⅱ) AC 1.5 kV 1 minute (Class Ⅰ)	d ≧ 4 mm d' ≧ 8 mm (Power cord) d' ≧ 6 mm (Primary wire)

Fig.1-1-11

AC Line Voltage	Region	Load Z	Leakage Current (i)	a, b, c
100 V	Japan	1 kΩ	i ≦ 1 mA rms	Exposed accessible parts
110 to 130 V	USA & Canada	0.15 μF, 1.5 kΩ	i ≦ 0.5 mA rms	Exposed accessible parts
110 to 130 V 220 to 240 V	Europe & Australia	2 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Antenna earth terminals
		50 kΩ	i ≦ 0.7 mA peak i ≦ 2 mA dc	Other terminals

Fig.1-1-12

NOTE :
These tables are unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

2.1 DIFFERENCE LIST

The following table indicate main different points between models GZ-MG67EX, GZ-MG67EY, GZ-MG67EZ, GZ-MG77EK, GZ-MG77EX, GZ-MG77EY and GZ-MG77EZ.

MODEL NAME	GZ-MG67EX	GZ-MG67EY	GZ-MG67EZ	GZ-MG77EK
HDD(BUILT-IN)	20GB	20GB	20GB	30GB
AC ADAPTER	AP-V17E	AP-V17E	AP-V17E	AP-V14E
AC CORD	NO	NO	NO	YES(BS Plug)
BATTERY PACK	BN-VF707US	BN-VF707UE	BN-VF707US	BN-VF707US

MODEL NAME	GZ-MG77EX	GZ-MG77EY	GZ-MG77EZ
HDD(BUILT-IN)	30GB	30GB	30GB
AC ADAPTER	AP-V17E	AP-V17E	AP-V17E
AC CORD	NO	NO	NO
BATTERY PACK	BN-VF707US	BN-VF707US	BN-VF707US

SECTION 3
DISASSEMBLY

3.1 BEFORE ASSEMBLY AND DISASSEMBLY

3.1.1 Precautions

- Be sure to disconnect the power supply unit prior to mounting and soldering of parts.
- Prior to removing a component part that needs to disconnect its connector(s) and its screw(s), first disconnect the wire(s) from the connector(s), and then remove the screw(s).
- When connecting/disconnecting wires, pay enough attention not to damage the connectors.
- When inserting the flat wire to the connector, pay attention to the direction of the flat wire.
- Be careful in removing the parts to which some spacer or shield is attached for reinforcement or insulation.
- When replacing chip parts (especially IC parts), first remove the solder completely to prevent peeling of the pattern.
- Tighten screws properly during the procedures. Unless otherwise specified, tighten screws at a torque of 0.098N·m (1.0kgf·cm). However, as this is a required value at the time of production, use the value as a measuring stick when proceeding repair services. (See "SERVICE NOTE" as for tightening torque.)

3.1.2 Destination of connectors

Two kinds of double-arrows in connection tables respectively show kinds of connector/wires.

⇔ : Flat wire ↔ : Wire ⬌ : Board to board (B-B)
: The connector of the side to remove

CONN. No.	CONNECTOR					PIN No.
CN2a	MAIN	CN101	⇔	MONI BW	CN761	40
CN2b	MAIN	CN103	↔	MINI BW	CN762	10

3.1.3 Disconnection of connectors (Wires)

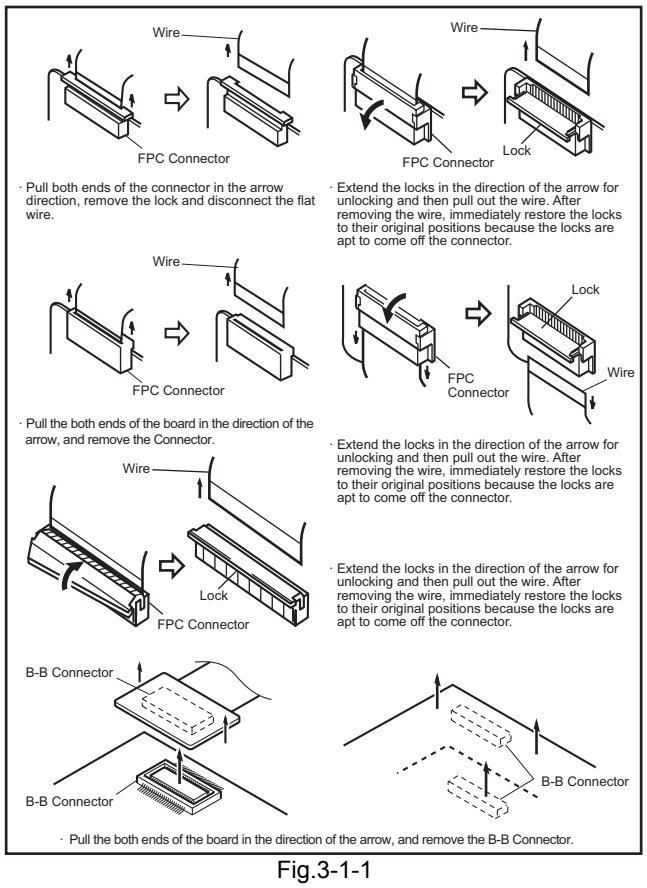

Wire
FPC Connector
· Pull both ends of the connector in the arrow direction, remove the lock and disconnect the flat wire.
Wire
Lock
FPC Connector
· Extend the locks in the direction of the arrow for unlocking and then pull out the wire. After removing the wire, immediately restore the locks to their original positions because the locks are apt to come off the connector.
Wire
FPC Connector
· Pull the both ends of the board in the direction of the arrow, and remove the Connector.
Lock
FPC Connector
Wire
· Extend the locks in the direction of the arrow for unlocking and then pull out the wire. After removing the wire, immediately restore the locks to their original positions because the locks are apt to come off the connector.
Wire
Lock
FPC Connector
· Extend the locks in the direction of the arrow for unlocking and then pull out the wire. After removing the wire, immediately restore the locks to their original positions because the locks are apt to come off the connector.
B-B Connector
B-B Connector
B-B Connector
· Pull the both ends of the board in the direction of the arrow, and remove the B-B Connector.

Fig.3-1-1

3.1.4 Tools required for disassembly and assembly

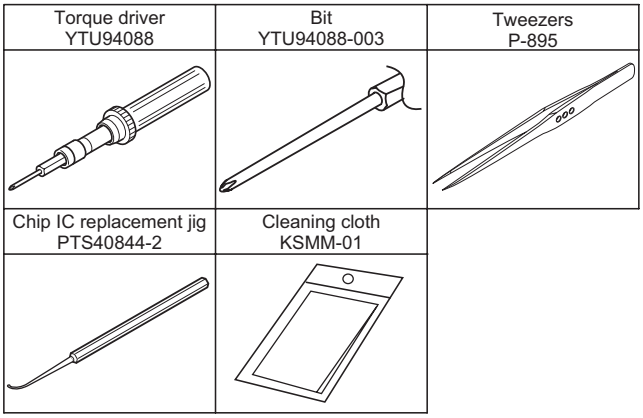


Fig.3-1-2

- **Torque driver**
  Be sure to use to fastening the mechanism and exterior parts because those parts must strictly be controlled for tightening torque.
- **Bit**
  This bit is slightly longer than those set in conventional torque drivers.
- **Tweezers**
  To be used for removing and installing parts and wires.
- **Chip IC replacement jig**
  To be used for replacement of IC.
- **Cleaning cloth**
  Recommended cleaning cloth to wipe down the video heads, mechanism (tape transport system), optical lens surface.

3.2 ASSEMBLY AND DISASSEMBLY OF MAIN PARTS

3.2.1 Assembly and disassembly

When reassembling, perform the step(s) in reverse order.

STEP No.	PART	Fig. No.	POINT	NOTE
[1]	TOP COVER ASSY	C1	4(S1a), 3(L1a),CN1a	-
[2]	UPPER ASSY (Inc. VF ASSY, SPEAKER/MONITOR)	C2-1	(S2a),2(S2b),3(S2c) 2(SD1a), L2,CN2a,b	-
[8]	E.VF UNIT(B/W)	C2-2	2(S8),L8,CN8a	NOTE 8
(∗1)	(∗2)	(∗3)	(∗4)	(∗5)

(∗1) Order of steps in Procedure
When reassembling, preform the step(s) in the reverseorder. These numbers are also used as the identification (location) No. of parts Figures.
(∗2) Part to be removed or installed.
(∗3) Fig. No. showing Procedure or Part Location.
(∗4) Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped or unsoldered.
S = Screw L = Lock, Release, Hook
SD = Solder CN = Connector

[Example]

- 4 (S1a) = Remove 4 S1a screws.
- 3 (L1a) = Disengage 3 L1a hooks.
- 2 (SD1a) = Unsolder 2 SD1a points.
- CN1a = Remove a CN1a connector.

(∗5) Adjustment information for installation.

3.2.2 ASSEMBLY/DISASSEMBLY OF CABINET PARTS AND ELECTRICAL PARTS

● **Disassembly procedure**

STEP No.	PART NAME	Fig. No.	POINT	NOTE
[1]	BOTTOM COVER ASSY	CA1	3(S1),3(L1)	-
[2]	HDD COVER ASSY	FA1	GRIP BELT,2(S2), JACK COVER(DC),L2a,b,c,d	NOTE2a,b,c,d
[3]	HDD	FA2	CN3	NOTE3a,b
[4]	HDD CASE ASSY	FA3	3(S4a),3(S4b)	-
[5]	TOP COVER(ZOOM)	FA4	CN5,JACK COVER(REAR),S5,L5a,b	NOTE5
[6]	ZOOM UNIT		SHIELD(ZOOM),2(S6),2(L6)	NOTE6
[7]	REAR BOARD ASSY	FA5	4(S7),L7a,JACK COVER(REAR), CN7a,CN7b,L7b,REAR UNIT	NOTE7
[8]	MONI.LOCK CASE ASSY	UA1	2(S8),2(L8)	-
[9]	COVER(HINGE-M)		2(S9),L9	-
[10]	UPPER ASSY	FA6	S10,L10,SHIELD(FRAME), CN10,3(S10)	-
[11]	OPE BOARD ASSY	UA2	S11a,INTERRUPTER, S11b,CN11a,b,3(S11b)	NOTE11a,b,c
[12]	TOP COVER(U-M)ASSY	UA3	2(S12),2(L12)	-
[13]	POWER SW ASSY		2(S13),2(L13)	-
[14]	MONITOR ASSY	UA4	2(S14),2(L14)	NOTE14
[15]	SPEAKER	UA5	4(S15),L15a,b,BKT(UPPER)	NOTE15
[16]	FRONT COVER ASSY	FA7	CN16,3(S16)	-
[17]	MIC		2(S17),L17,BKT(MIC-M)	-
[18]	STROBE UNIT	FA8	CN18,2(S18),L18	NOTE18
[19]	MAIN BOARD ASSY	FA9	CN19a,b,c,2(S19)	NOTE19
[20]	OP BLOCK ASSY	FA10	2(S20),SHIELD M ASSY, 3(S20),2(L20)	NOTE20

NOTE2a:
During the procedure, leave the GRIP BELT removed from the hook.

NOTE2b:
When removing the HDD COVER ASSY, leave the JACK COVER (DC) released.

NOTE2c:
During the procedure, be careful not to damage the tabs.

NOTE2d:
When removing the HDD COVER ASSY, be careful in handling as the HDD may come off.

NOTE3a:
During the procedure, be careful in handling the HDD. Make sure not to give any shock to the HDD.

NOTE3b:
When attaching the HDD, check the positions of the marks, and be careful with the GEL lift.

NOTE5:
The screw (No.12) is located under the JACK COVER (REAR).

NOTE6:
Do not disassemble the ZOOM UNIT if not needed as the SHIELD (ZOOM) is attached to the terminals.

NOTE7:
When removing the REAR UNIT, be careful in handling as the JACK COVER (REAR) comes off together.

NOTE11a:
Remove the screw (No.28), which tightens up the FPC, before connecting/ disconnecting the FPC to/ from the connector.

NOTE11b:
When attaching the two switches (POWER, MODE), be careful with the attachment locations. Attach the levers and switches fixed to one direction as they can be fixed (except the MODE switch lever). After the attachment, check the operation by moving the switch levers.

NOTE11c:
When attaching the SPEAKER WIRE, be careful in the wiring and not to catch the WIRE in between.

NOTE14:
Refer to 3.2.3 ASSEMBLY/DISASSEMBLY OF [14] MONITOR ASSEMBLY for the disassembly of the MONITOR ASSY.

NOTE15:
When attaching the SPEAKER, be careful with the attachment location. Attach the OPE BOARD ASSY first, and then follow the figure for the SPKEAKER wiring.

NOTE18:
During the procedure, be careful to avoid electric shock caused by the STROBE CAPACITOR.

NOTE19:
When attaching the MAIN BOARD ASSY, make sure to insert the corner of the MAIN BOARD ASSY into the slit of the FRAME ASSY.

NOTE20:
Refer to 3.2.4 ASSEMBLY/DISASSEMBLY OF [20] OP BLOCK ASSEMBLY/CCD BOARD ASSEMBLY.

● **Destination of connectors**

CN. No.	CONNECTOR					PIN No.
CN3	HDD	-	⇔	MAIN	CN102	40
CN5	ZOOM UNIT	-	⇔	MAIN	CN104	6
CN7a	REAR	CN6001	⇔	MAIN	CN103	53
CN7b	TRIG SW	-	⇔	REAR	CN6002	6
CN10	OPE	CN401	⇔	MAIN	CN101	50
CN11a	OPE	CN402	⇔	MONITOR	CN7601/7602	24,12/12
CN11b	OPE	CN403	↔	SPEAKER	-	2
CN16	MIC	-	↔	MAIN	CN107	4
CN18	STROBE UNIT	-	⇔	MAIN	CN112	14
CN19a	CDS	CN803	↔	MAIN	CN113	4
CN19b	CDS	CN802	⇔	MAIN	CN105	53
CN19c	OP BLOCK	-	⇔	MAIN	CN106	24

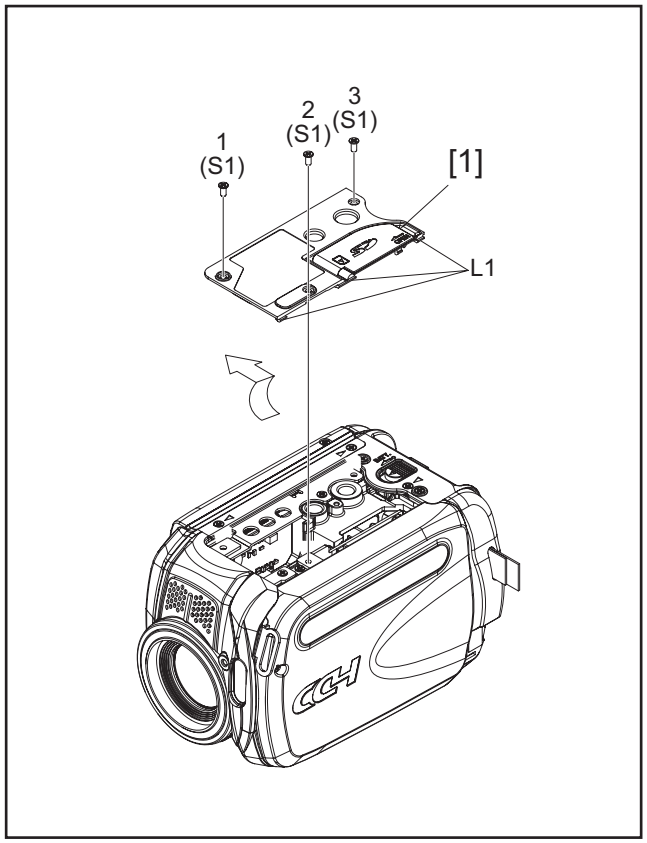


Fig.CA1

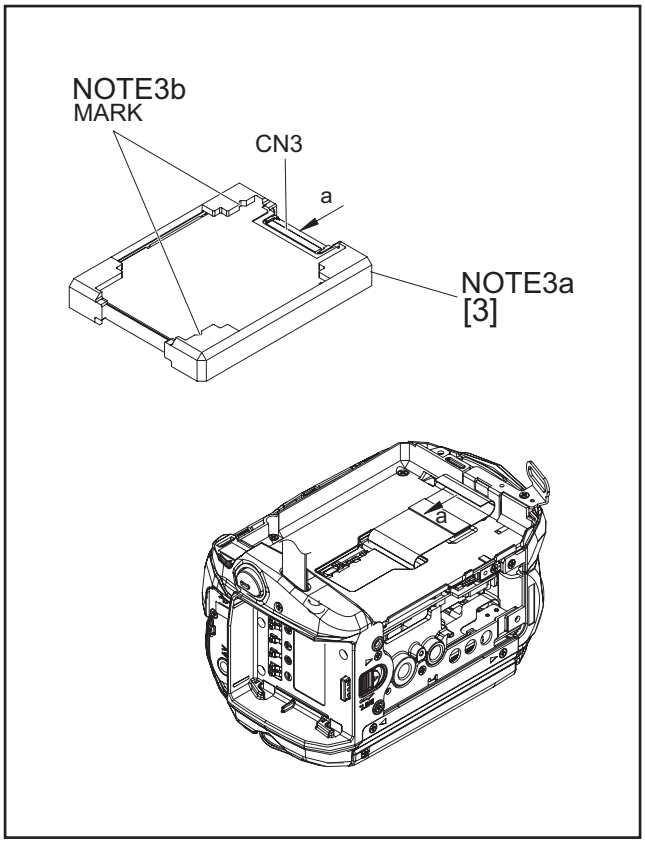


Fig.FA2

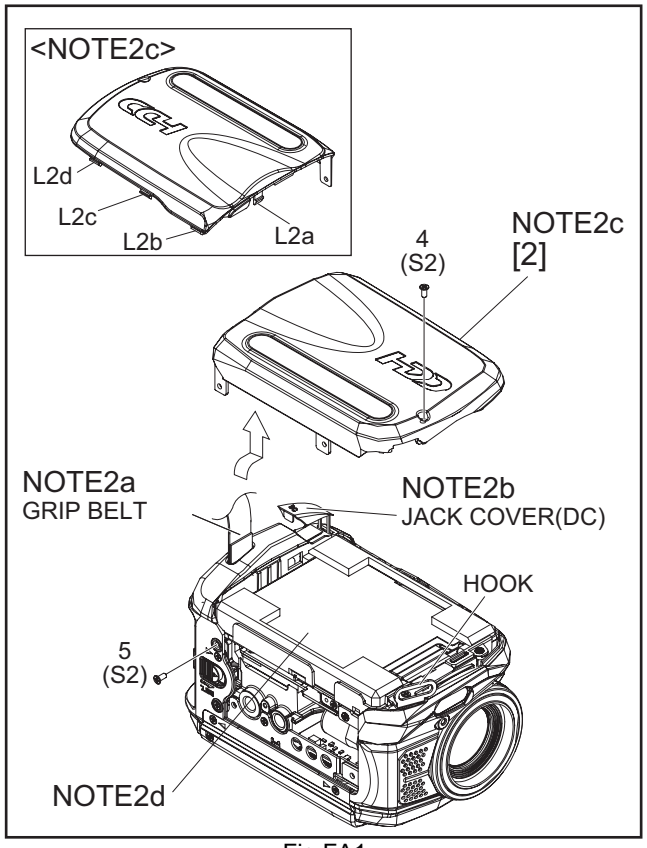


Fig.FA1

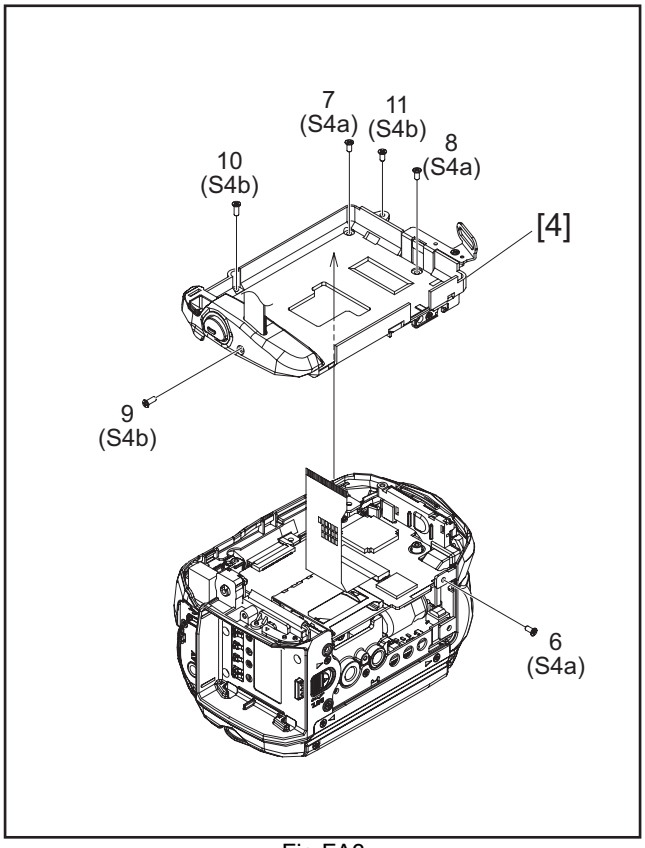


Fig.FA3

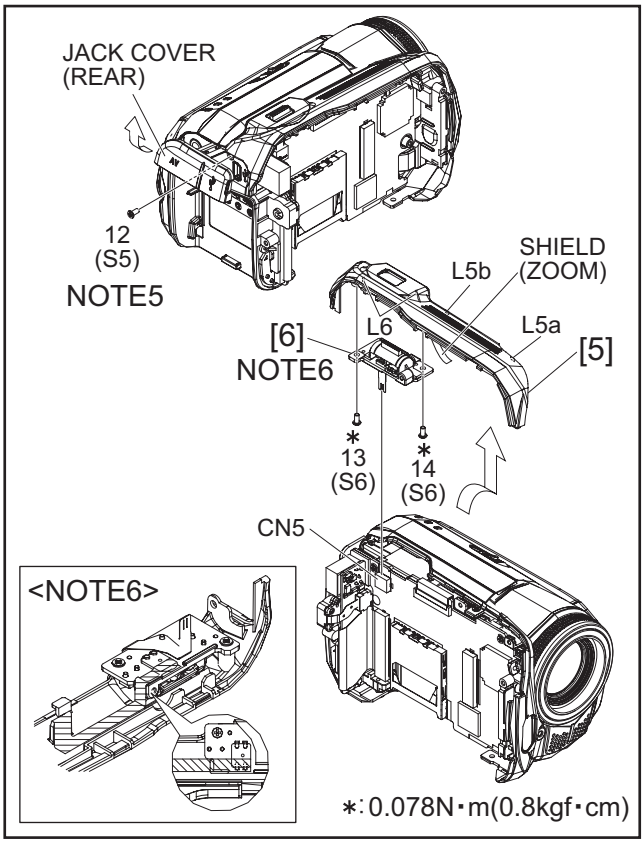
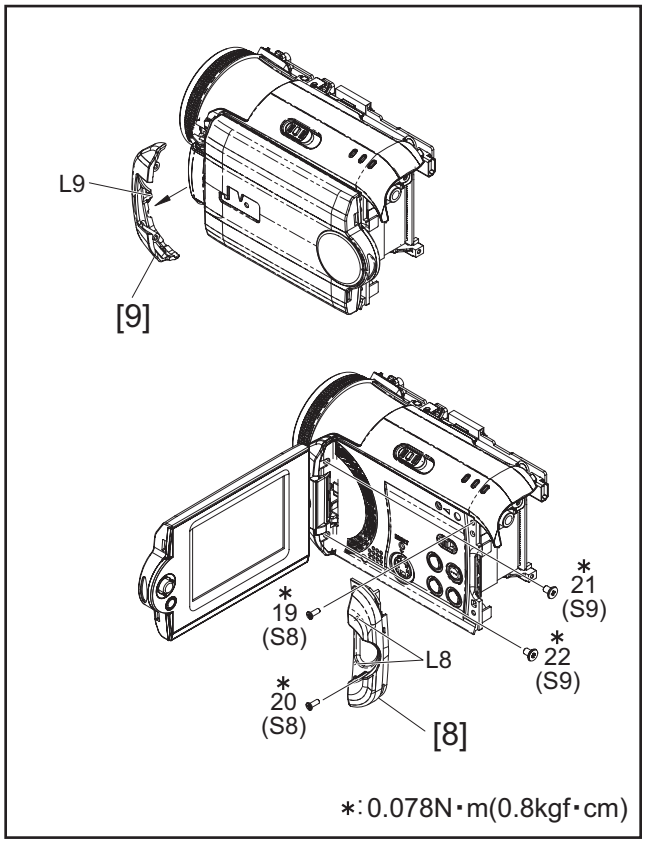


Fig.FA4



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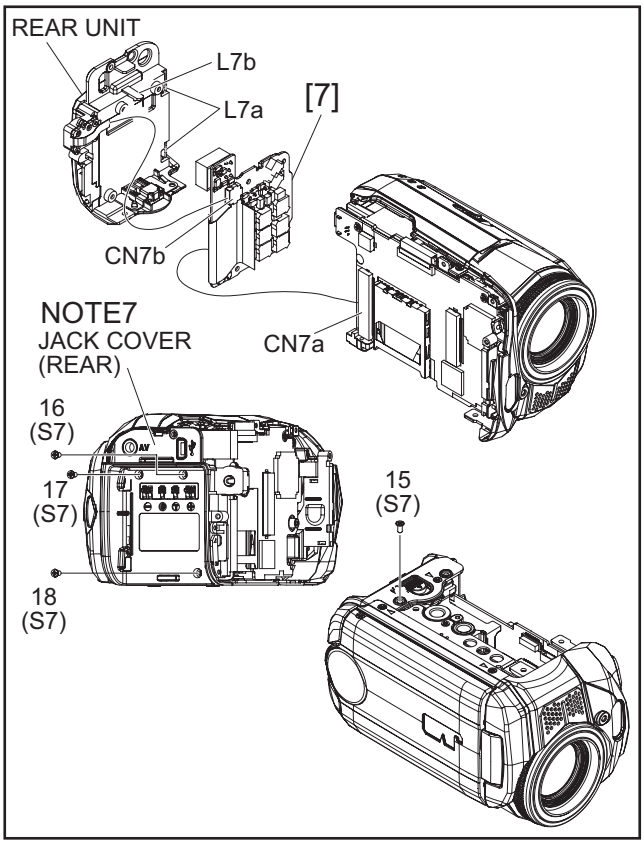
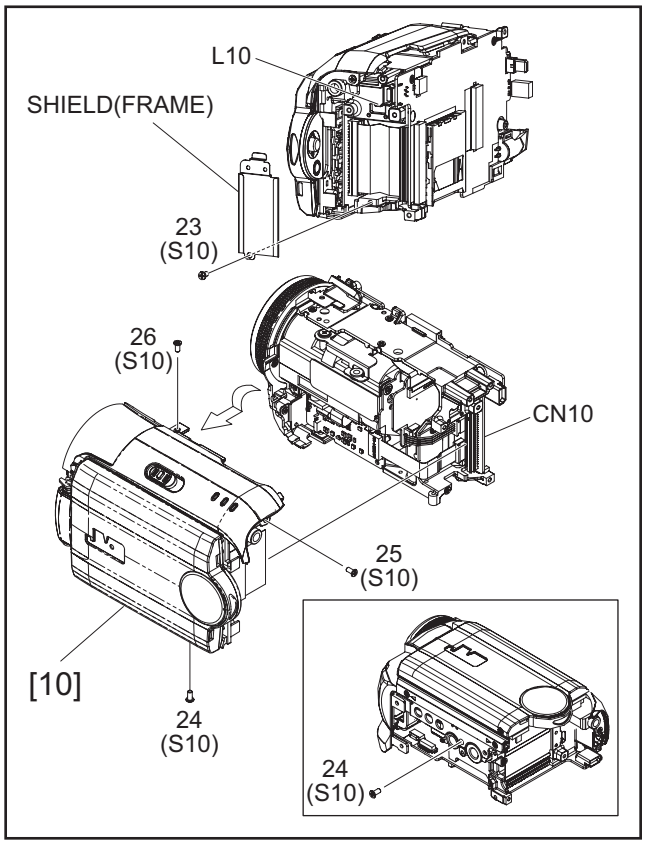


Fig.FA5



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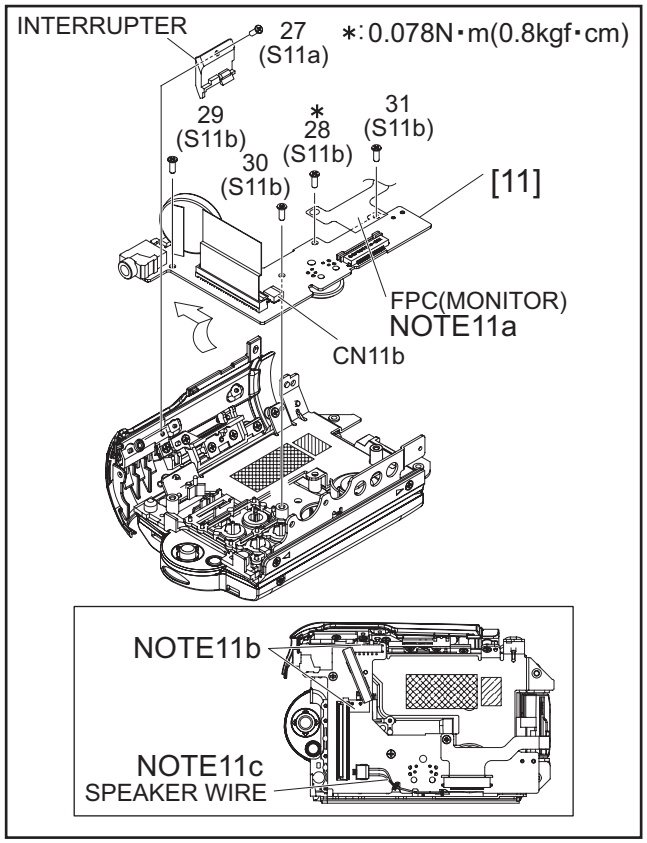

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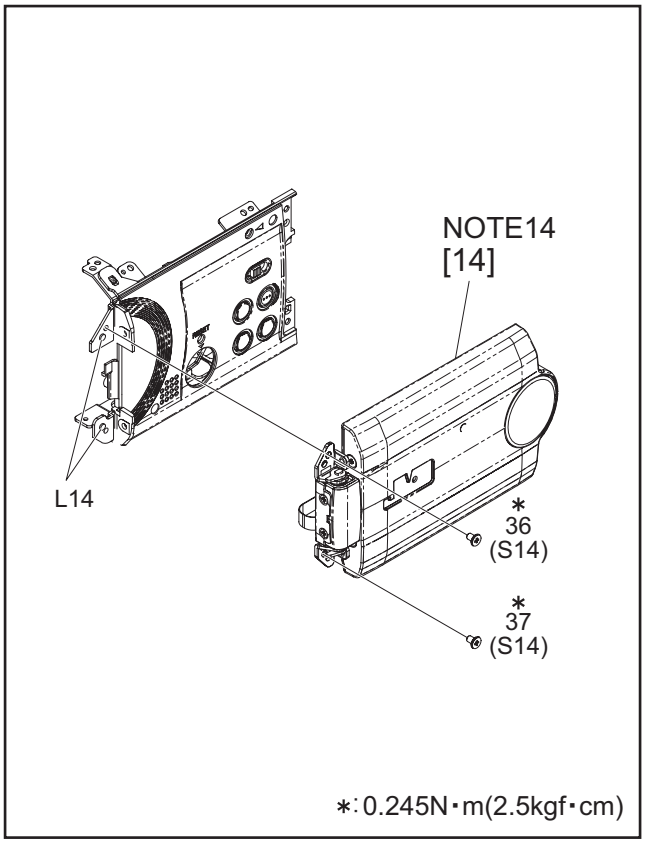


Fig.UA1

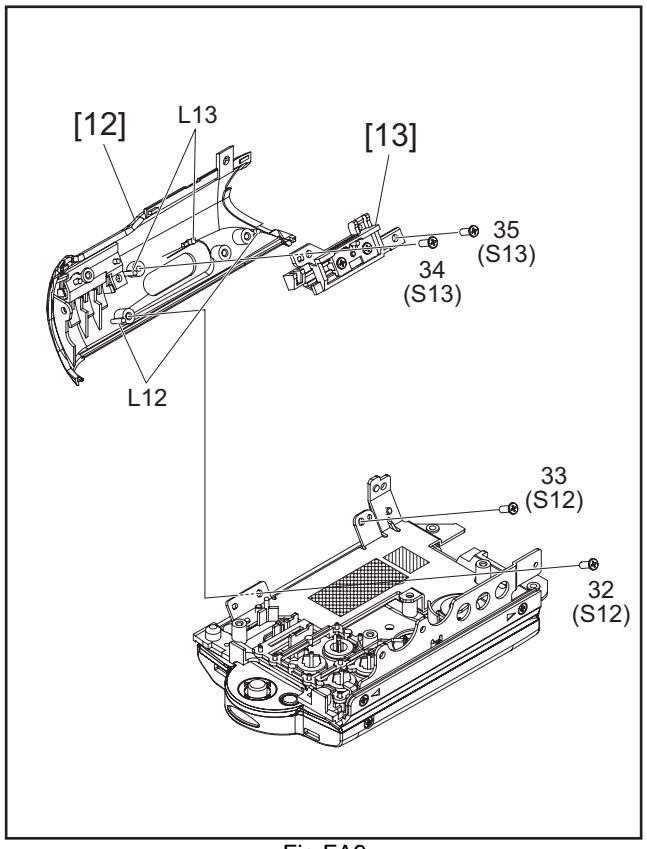


Fig.FA9

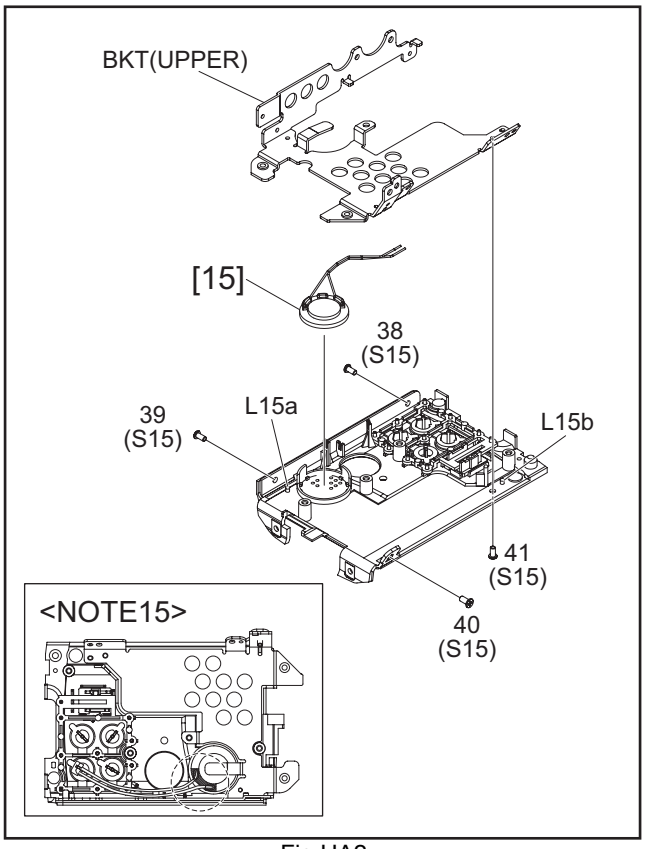


Fig.UA2

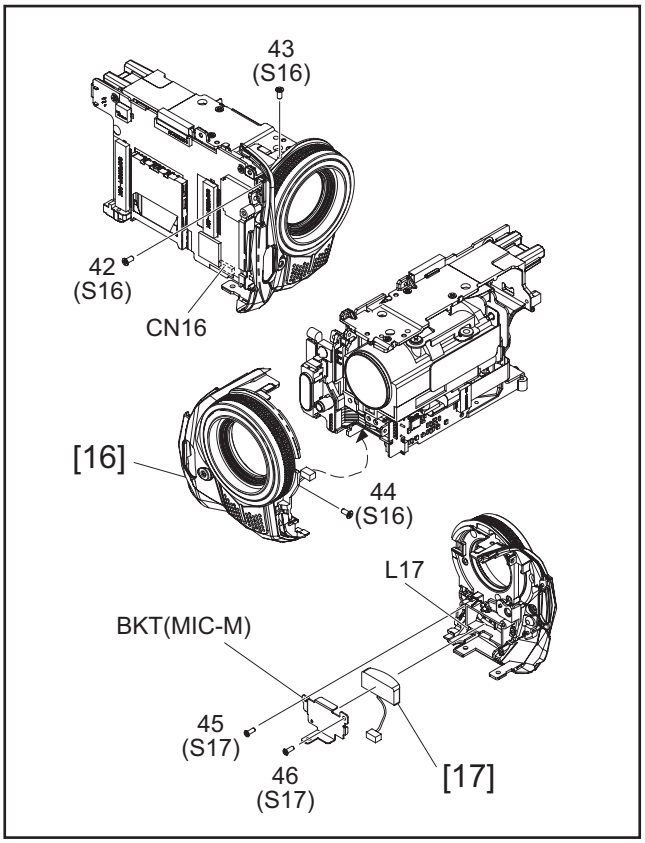


Fig.UA3

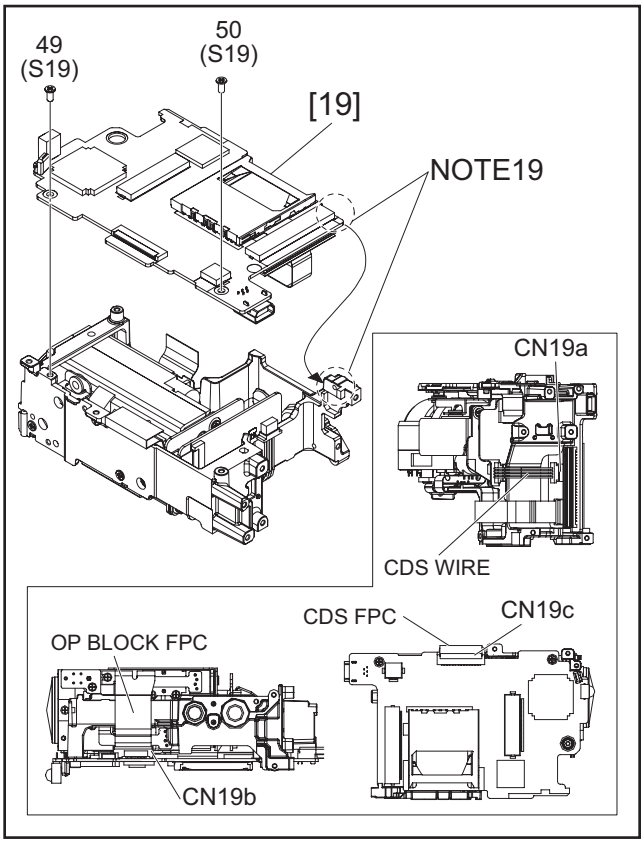


Fig.FA10

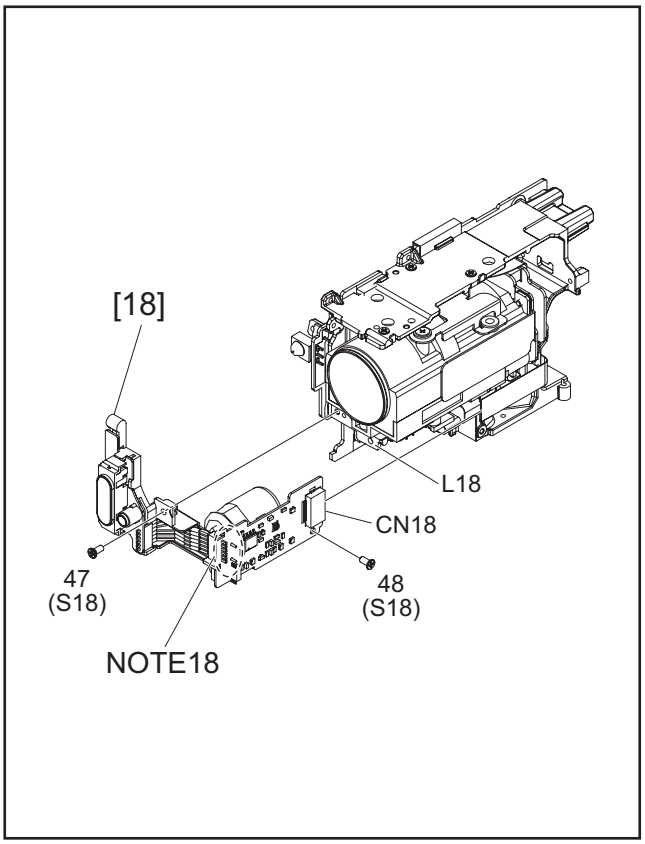


Fig.UA4

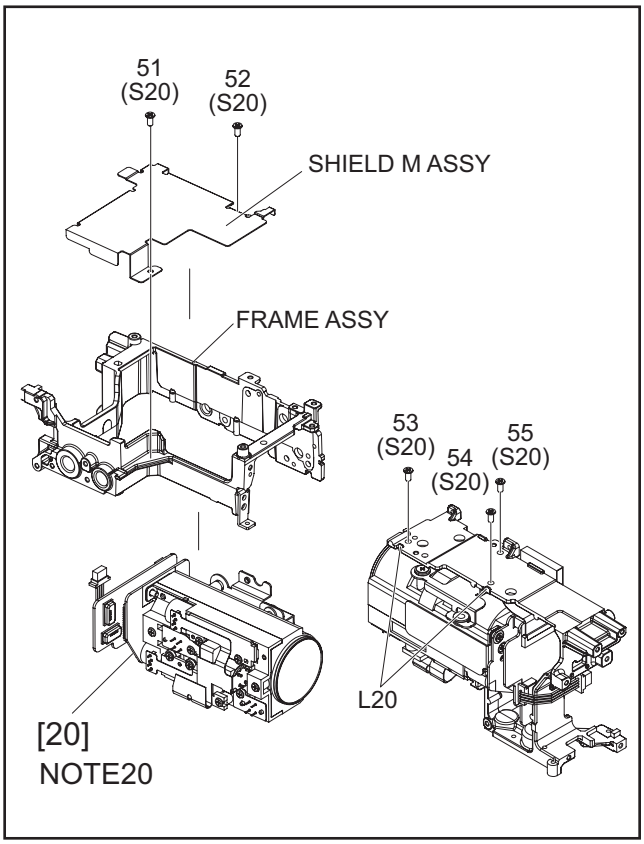


Fig.FA11

3.2.3 ASSEMBLY/DISASSEMBLY OF [14] MONITOR ASSEMBLY

●CAUTIONS

(1) Remove the MONITOR ASSEMBLY from the UPPER ASSEMBLY first, as they are removed together in main parts disassembly, and then proceed to the disassembly procedure.
(2) During the procedure, be careful in handling the LCD MODULE and other parts. Pay special attention not to damage or soil the monitor screen.If fingerprints are left on the screen, wipe them with clean chamois leather or a cleaning cloth.

●Removing MONITOR ASSEMBLY

(1) Turn the HINGE UNIT ASSEMBLY 90°, and remove the three screws (1-3). Remove the MONITOR COVER ASSEMBLY by removing the six hooks (L14a-f).
(2) Pull out the U/D SWITCH BOARD from the MONITOR CASE ASSEMBLY.

NOTE14a:

During the procedure, be careful in handling the FPC.

(3) Release the lock of the connector (CN14a,b), and remove the HINGE UNIT by lifting it up.
(4) Release the lock of the connector (CN14c,d), and pull out the FPC.
(5) Remove the two screws (4,5), and Remove the MONI-BL BOARD ASSEMBLY by removing the hook (L14h).
(6) Remove the BACK LIGHT.
(7) Remove the LCD MODULE.
(8) Remove the LCD BKT.

●Removing HINGE UNIT ASSEMBLY

(1) Remove the two screws (6,7), and then remove the HINGE COVER (U,L).

NOTE14b:

During the procedure, be careful in handling the MAGNET and be careful with its attachment direction. Make sure to attach the MAGNET with its mark facing inward.

NOTE14c:

During the procedure, be careful in handling the FPC.

NOTE14d:

The FPC, with its connection to the MONITOR BOARD ASSEMBLY facing inward, is rolled around the axis (shaft) of the HINGE ASSEMBLY rotation 2.5 rounds (2.5times).

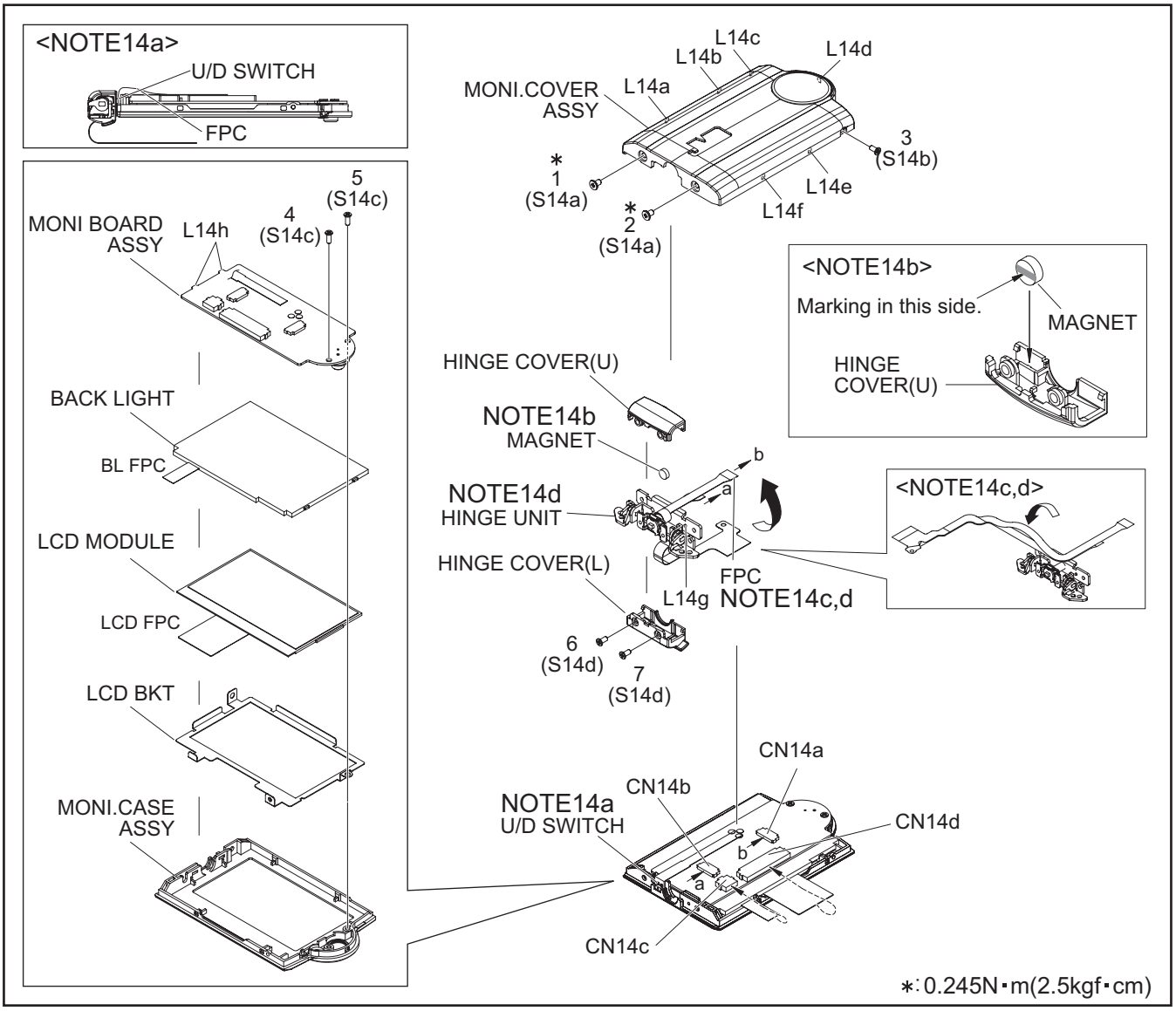


Fig.3-2-3

3.2.4 ASSEMBLY/DISASSEMBLY OF [20] OP BLOCK ASSEMBLY/CCD BOARD ASSEMBLY

●Precautions

(1) Take care in handling the CCD IMAGE SENSOR, OPTICAL LPF and lens components when performing maintenance etc., especially with regard to surface contamination, attached dust or scratching. If fingerprints are present on the surface they should be wiped away using either a silicon paper, clean chamois or the cleaning cloth.

(2) The CCD IMAGE SENSOR may have been shipped with a protective sheet attached to the transmitting glass. When replacing the CCD IMAGE SENSOR, do not peel off this sheet from the new part until immediately before it is mounted in the OP BLOCK ASSEMBLY.

(3) As the attachment direction of the OPTICAL LPF is important, be careful when removing it. Make sure to reattach the OPTICAL LPF in its original direction.

●Disassembly of OP BLOCK ASSEMBLY / CCD BOARD ASSEMBLY

(1) Remove the two screws (1, 2), and then remove the BKT (OP) ASSY.

(2) Be careful in handling the SPACER and the CONNECTOR that connects the CDS BOARD ASSY and the CCD BOARD ASSY. Remove the CDS BOARD ASSY by pulling it parallel to the CCD BOARD ASSY.

(3) Remove the two screws (3, 4), and then remove the CCD BOARD ASSY, SHIELD (CCD), HEAT SHEET (CCD), and the CCD BASE ASSY.

NOTE20a:

Be careful in handling as there are only the OPTICAL LPF and the SHEET stored inside the OP BLOCK ASSY when the CCD BASE ASSY is removed.

(4) Remove the SHEET and the OPTICAL LPF.

(5) Unsolder the 24 solder points (SD20a), remove the two screws (5, 6), and then remove the CCD BASE ASSY.

NOTE20b:

Replace the CCD image sensor as a whole unit of CCD BASE ASSY instead of replacing it as a single part.

(6) Detach the HEAT SHEET (CCD), and remove the SHIELD (CCD) from the CCD BOARD ASSY.

●Assembly of OP BLOCK ASSEMBLY / CCD BOARD ASSEMBLY

(1) Set the SHIELD (CCD) first, then the HEAT SHEET (CCD), and then the CCD BASE ASSY to the CCD BOARD ASSY, and tighten them with the screws (5, 6).

(2) Solder the 24 solder points (SD20a) on the CCD BOARD ASSY.

(3) Set the OPTICAL LPF first, and then the SHEET to the OP BLOCK ASSEMBLY.

NOTE20c:

When attaching the OPTICAL LPF, be careful with the attachment direction to avoid any uplift or unevenness for the sheet attachment.

(4) Attach the CCD BOARD ASSY (CCD BASE ASSY and others), and then tighten them with the two screws (3, 4).

●Replacement of service repair parts

The service repair parts for the OP BLOCK ASSEMBLY are as listed below.Take special care not to disconnect any of the FPC wires or cause any damage due to soldering (excessive heating).

(1) FOCUS MOTOR UNIT

(2) ZOOM MOTOR UNIT

(3) AUTO IRIS UNIT

NOTE20d:

When replacing the FOCUS MOTOR UNIT or the ZOOM MOTOR UNIT, solder the FPC at a space of about 0.5 mm above the terminal pin.

NOTE20e:

The AUTO IRIS UNIT includes the FPC ASSEMBLY and two sensors.

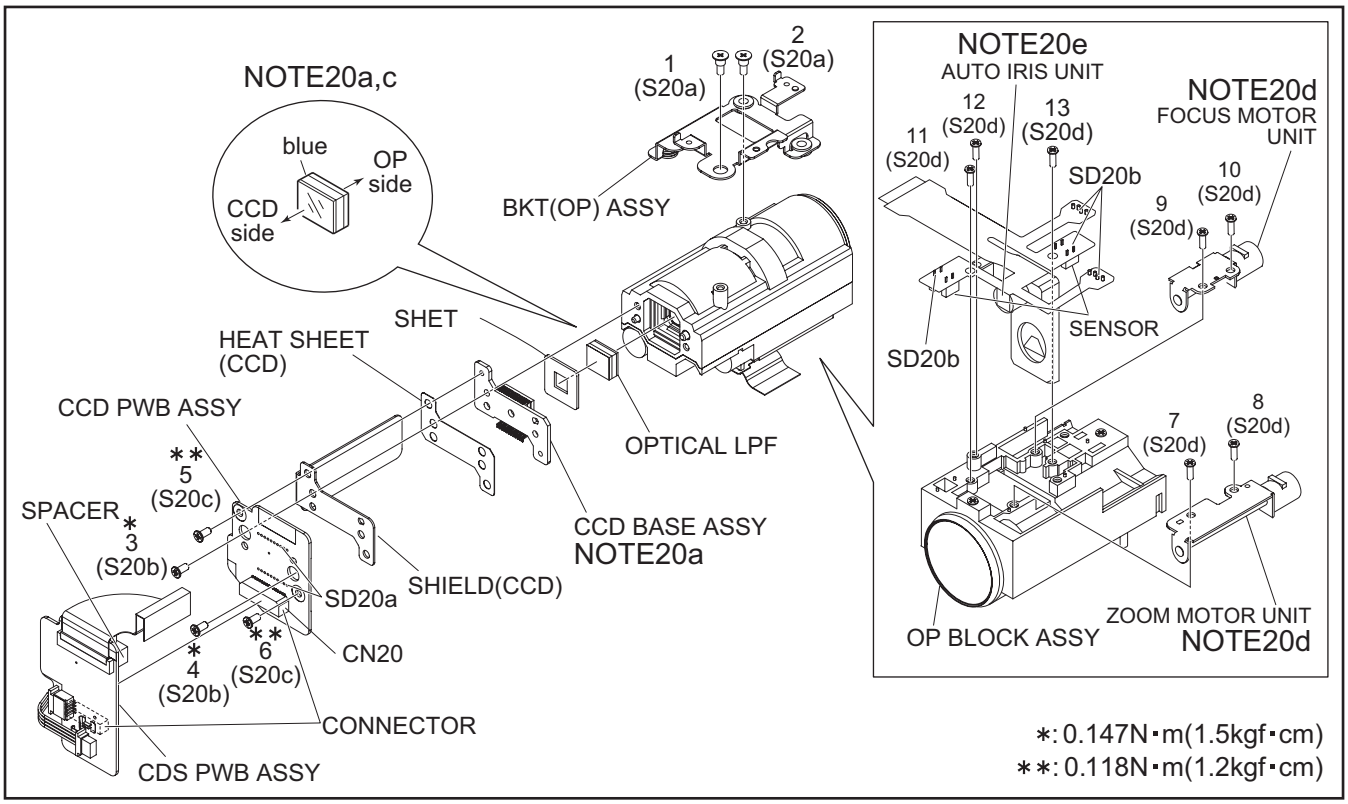


Fig.3-2-4

SECTION 4
ADJUSTMENT

4.1 PREPARATION

4.1.1 Precaution

Camera system and deck system of this model are specially adjusted by using PC.

However, if parts such as the following are replaced, an adjustment is required. The adjustment must be performed in a Service Center equipped with the concerned facilities.

- OP BLOCK ASSEMBLY
- MONITOR ASSEMBLY
- EEP ROM (IC4502 of MAIN board)

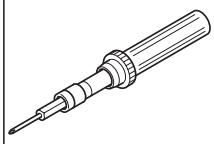
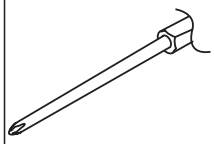
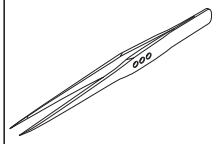
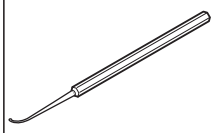
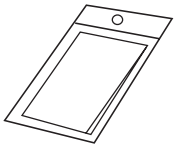
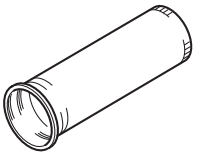
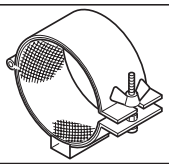
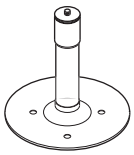
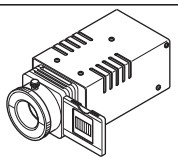
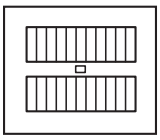
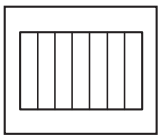
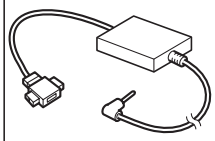
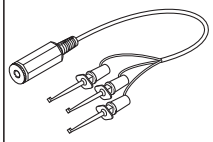
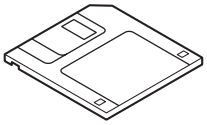
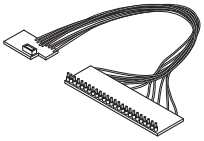
In the event of malfunction with electrical circuits, first find a defective portion with the aid of proper test instruments as shown in the following electrical adjustment procedure, and then commence necessary repair/ replacement/adjustment.

- In observing chip TP, use IC clips, etc. to avoid any stress. Prior to replacement of chip parts (especially IC), remove the solder completely to prevent peeling of the pattern.
- Use a patch cord if necessary. As for a patch cord, see the BOARD INTERCONNECTIONS.
- Since connectors are fragile, carefully handle them in disconnecting and connecting the FPC.

4.1.2 REQUIRED TEST EQUIPMENT

- Personal computer (for Windows)
- Color TV monitor
- Oscilloscope (dual-trace type, observable 100MHz or higher frequency). The one observable 300 MHz or higher frequency is recommended.
- Digital voltmeter
- DC power supply or AC adapter
- Frequency counter (with threshold level adjuster)

4.1.3 TOOLS REQUIRED FOR ADJUSTMENT

Torque Driver YTU94088	Bit YTU94088-003	Tweezers P-895
		
Chip IC Replacement Jig PTS40844-2	Cleaning Cloth KSMM-01	INF Adjustment Lens YTU92001B
		
INF Adjustment Lens Holder YTU94087	Mini Stand YTU93108	Light box Assembly YTU93096A
		
Gray Scale Chart YTU94133A	Color Bar Chart YTU94133C	PC Cable QAM0099-005
		
Communication Cable YTU93107B	Service Support System YTU94057-95	Jig Connector Cable YTU93106A
		
Conversion Connector YTU94145L-30		

- **Torque driver**
  Be sure to use to fastening the mechanism and exterior parts because those parts must strictly be controlled for tightening torque.
- **Bit**
  This bit is slightly longer than those set in conventional torque drivers.
- **Tweezers**
  To be used for removing and installing parts and wires.
- **Chip IC replacement jig**
  To be used for adjustment of the camera system.
- **Cleaning cloth**
  Recommended the Cleaning cloth to wipe down the video heads, mechanism (tape transport system), optical lens surface.

- **INF adjustment lens**
  To be used for adjustment of the camera system. For the usage of the INF adjustment lens, refer to the Service Bulletin No. YA-SB-10035.
- **INF adjustment lens holder**
  To be used together with the Camera stand for operating the Videocamera in the stripped-down condition such as the status without the exterior parts or for using commodities that are not yet conformable to the interchangeable ring. For the usage of the INF lens holder, refer to the Service Bulletin No. YA-SB-10035.
- **Mini stand**
  To be used together with the INF adjustment lens holder. For the usage of the Mini stand, refer to the Service Bulletin No. YA-SB-10035.
- **Light box assembly**
  To be used for adjustment of the camera system. For the usage of the Light box assembly, refer to the Service Bulletin No. YA-SB-10035.
- **Gray scale chart**
  To be used for adjustment of the camera system. For the usage of the INF adjustment lens, refer to the Service Bulletin No. YA-SB-10035.
- **Color bar chart**
  To be used for adjustment of the camera system. For the usage of the INF adjustment lens, refer to the Service Bulletin No. YA-SB-10035.
- **PC cable**
  To be used to connect the Videocamera and a personal computer with each other when a personal computer issued for adjustment.
- **Communication cable**
  Connect the Communication cable between the PC cable and Jig connector cable when performing a PC adjustment.
- **Service support system**
  To be used for adjustment with a personal computer. Software can be downloaded also from JS-net.
- **Jig connector cable**
  Connected to JIG CONNECTOR of the main board and used for electrical adjustment, etc.
- **Conversion connector**
  Conversion connector is used to convert the connector part of the JIG connector cable.

4.2 JIG CONNECTOR CABLE CONNECTION

■ Connection procedure

NOTE

Be sure to turn the power “OFF”, when connecting the JIG CONNECTOR CABLE.
If the JIG CONNECTOR CABLE is connected with the power “ON”, communication error may occur.

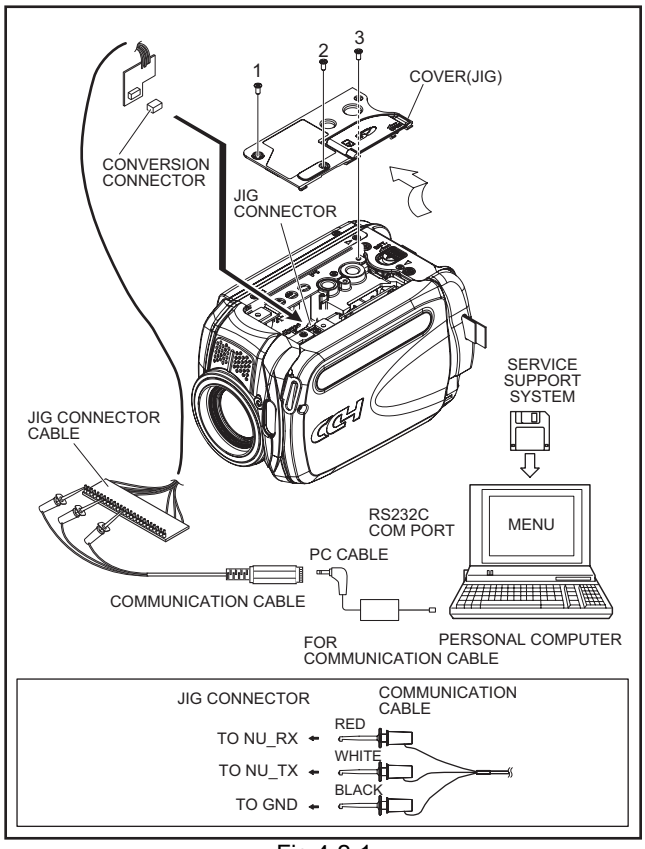
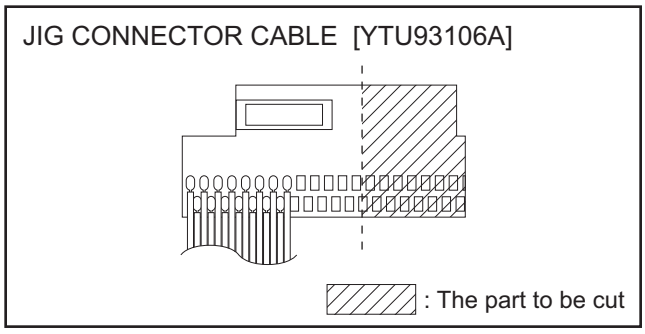


Fig.4-2-1

CAUTION

The JIG CONNECTOR CABLE cannot be connected with the COVER (JIG) removed because of its structure. It is necessary to cut a part of the connector board as shown below. Pay special attention during the procedure.



■ **Jig connector diagrams**

JIG CONNECTOR CABLE (YTU93106A)

MAIN CN110

ARMTDO	1		
ARMTCK		16	
ARMTMS	2		
ARMTDI		17	
XARMTRST	3		
XJRESET		18	
REG_3.1V	4		
NU_RX		19	
NU_TX	5		
AL_3.1V		20	
SJIG_TX	6		
SJIG_RX		21	
MODO	7		
SJIG_RST		22	
NC	8		
GND		23	
MON_B	9		
HRP		24	
MON_R	10		
GND		25	
MON_G	11		
NC		26	
VDCVF	12		
NC		27	
NC	13		
ZGH_OUT		28	
ZGH_THRU	14		
SBD5		29	
SBT5	15		
WORD		30	

JIG CONN. BOARD (PIN NO.)

1	ARMTDO
2	ARMTMS
3	XARMTRST
4	REG_3.1V
5	NU_TX
6	SJIG_TX
7	MODO
8	NC
9	MON_B
10	MON_R
11	MON_G
12	VDCVF
13	NC
14	ZGH_THRU
15	SBT5
16	ARMTCK
17	ARMTDI
18	XJRESET
19	NU_RX
20	AL_3.1V
21	SJIG_RX
22	SJIG_RST
23	GND
24	HRP
25	GND
26	NC
27	NC
28	ZGH_OUT
29	SBD5
30	WORD

Fig.4-2-2

CABINET PARTS AND ELECTRICAL PARTS(1)

Symbol No.	[1]			[2]		[3]	[4]						[5]	[6]		[7]				[8]		[9]	
Removing order of screw	1	2	3	4	5	-	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Place to stick screw	*	*	*	*	*	-	*	*	*				*			*	*	*	*				
Reference drawing (Fig.No.)	CA1			FA1		FA2	FA3						FA4			FA5				UA1			
Screw tightening torque	a													e		a				e			

CABINET PARTS AND ELECTRICAL PARTS(2)

Symbol No.	[10]				[11]					[12]		[13]		[14]		[15]				[16]			[17]	
Removing order of screw	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
Place to stick screw	*	*	*	*	*					*	*	*	*	*	*	*	*	*	*	*	*	*		
Reference drawing (Fig.No.)	FA6				UA2					UA3				UA4		UA5				FA7				
Screw tightening torque	a					e	a							b		a								

CABINET PARTS AND ELECTRICAL PARTS(3)

Symbol No.	[18]		[19]		[20]				
Removing order of screw	47	48	49	50	51	52	53	54	55
Place to stick screw	*	*	*	*	*	*	*	*	*
Reference drawing (Fig.No.)	FA8		FA9		FA10				
Screw tightening torque	a								

[14]MONITOR ASSY

Symbol No.	[14]						
Removing order of screw	1	2	3	4	5	6	7
Place to stick screw	*	*	*			*	*
Reference drawing (Fig.No.)	3-2-3						
Screw tightening torque	b	a					

[20]OP BLOCK ASSY/CCD BOARD ASSY

[20]												
1	2	3	4	5	6	7	8	9	10	11	12	13
				*	*							
3-2-4												
a	d	c	a									

NOTE:

1) * and ** (This mark shows where to attach the screws) : Do not reuse the screws because the screw lock bond was applied to prevent the screws from loosening. Prepare the specified screws and use them in place of the removed screws.

2)Tightening torque for the screws

- There are setting limits of the torque value for the torque driver. If the value exceeds the setting value, take it as a rough measurement (reference value), and tighten the screw manually.
- The specified torque value is a recommended value of the initial assembly. Therefore, set the value below the specified torque value in the assembling procedure. Be careful not to break either the screws or the screw holes.

a : 0.098N·m (1.0kgf·cm)　b : 0.248N·m (2.5kgf·cm)　c : 0.118N·m (1.2kgf·cm)　d : 0.147N·m (1.5kgf·cm)　e : 0.078N·m (0.8kgf·cm)

JVC
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Camcorder Category 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

(No.YF139)

Printed in Japan
VPT

PARTS LIST

SAFETY PRECAUTION

Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.

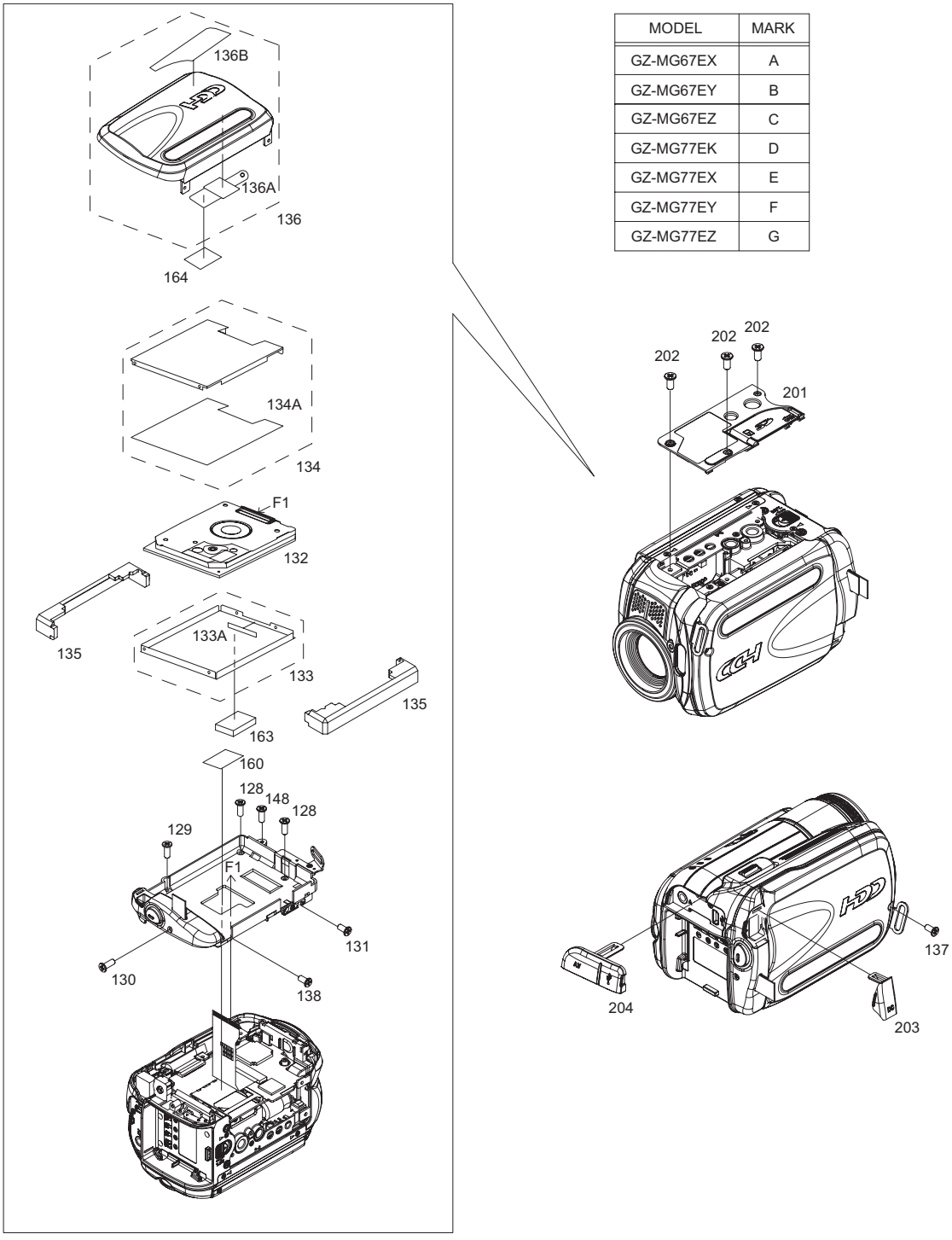
BEWARE OF BOGUS PARTS

Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.

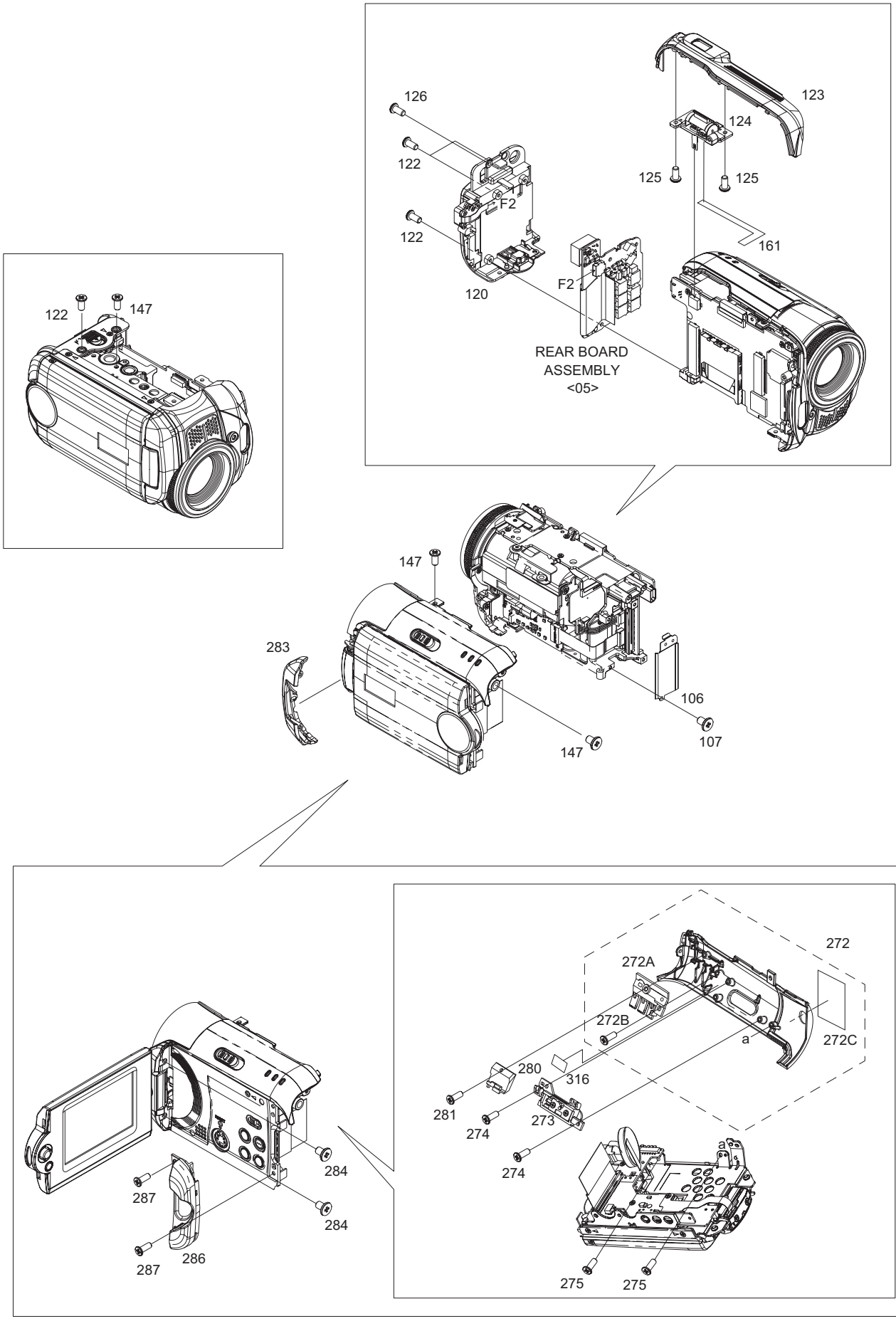
1. EXPLODED VIEW

1.1 FINAL ASSEMBLY<M1>

The instruction manual to be provided with this product will differ according to the destination.



MODEL	MARK
GZ-MG67EX	A
GZ-MG67EY	B
GZ-MG67EZ	C
GZ-MG77EK	D
GZ-MG77EX	E
GZ-MG77EY	F
GZ-MG77EZ	G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F2
120
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F2
REAR BOARD
ASSEMBLY
<05>
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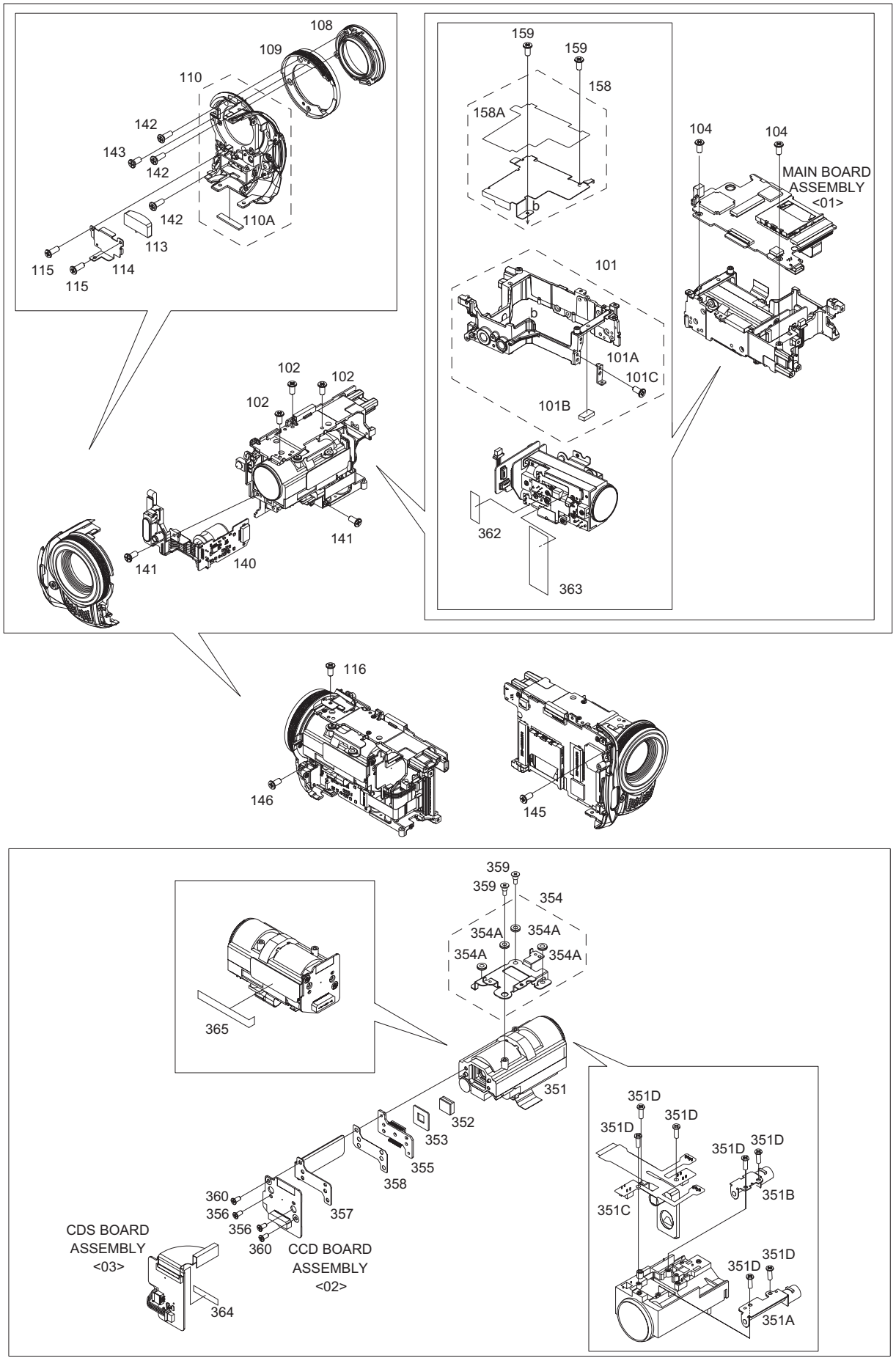
147
147
283
106
107
147
272
272A
272B
272C
a
280
316
281
274
273
274
a
275
275
284
287
284
287
286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142
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158A
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104
MAIN BOARD
ASSEMBLY
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101
101A
101C
101B
102
102
102
141
141
140
362
363
116
146
145
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354A
354A
354A
354A
365
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358
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CDS BOARD
ASSEMBLY
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CCD BOARD
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351D
351D
351D
351B
351C
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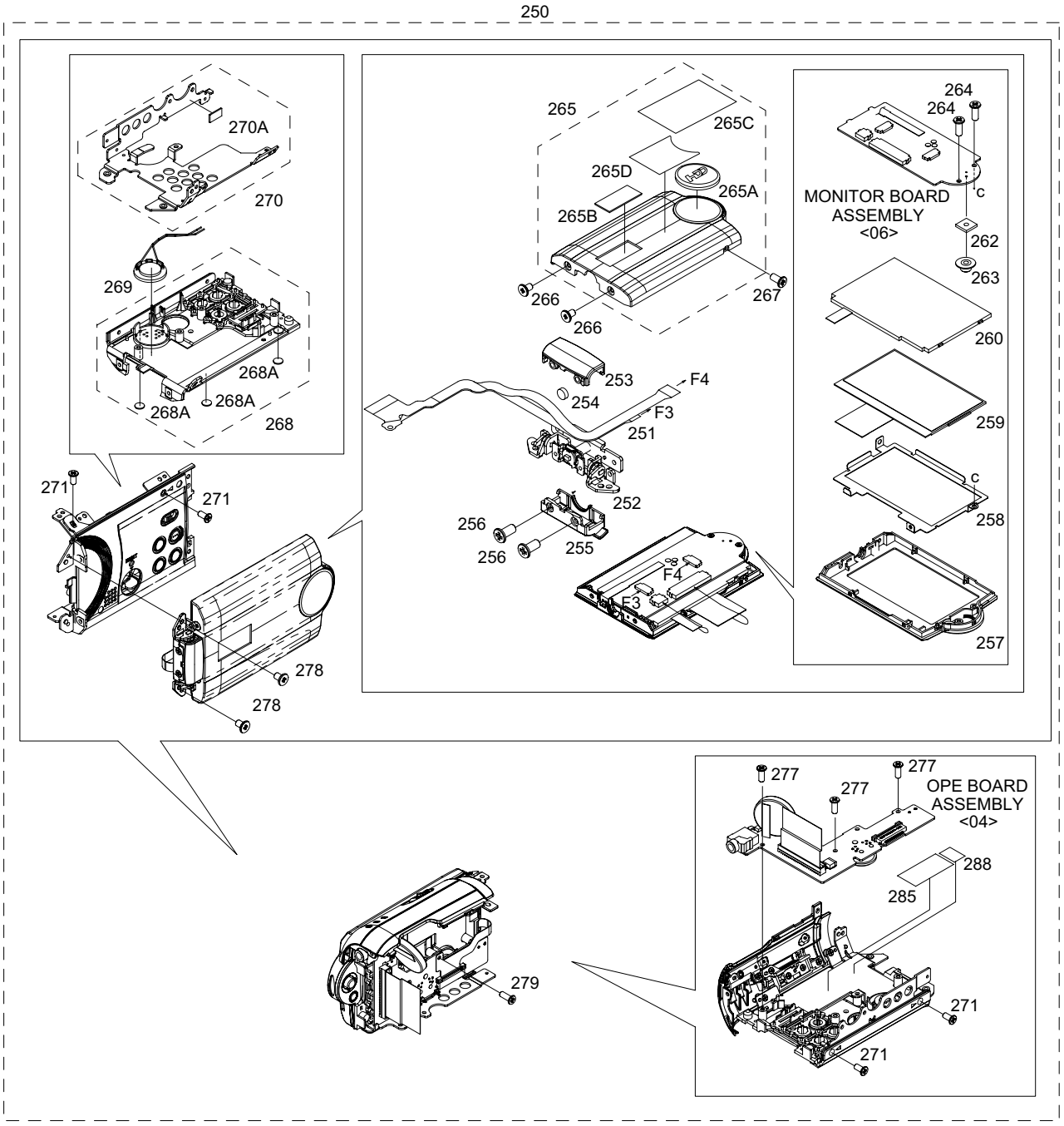
351A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265C
265D
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265B
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253
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F4
F3
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264
264
MONITOR BOARD
ASSEMBLY
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ASSEMBLY
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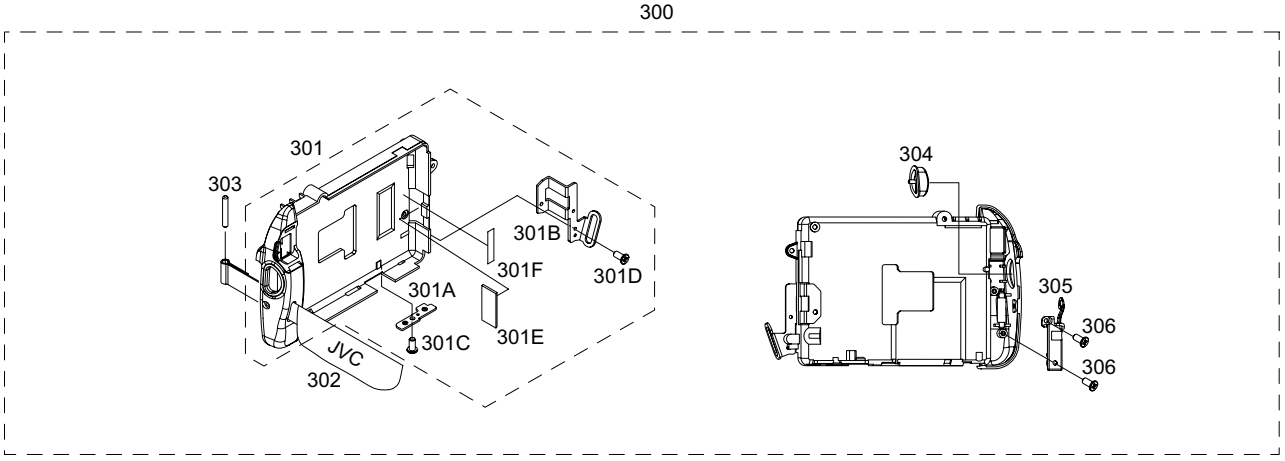
300
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JVC
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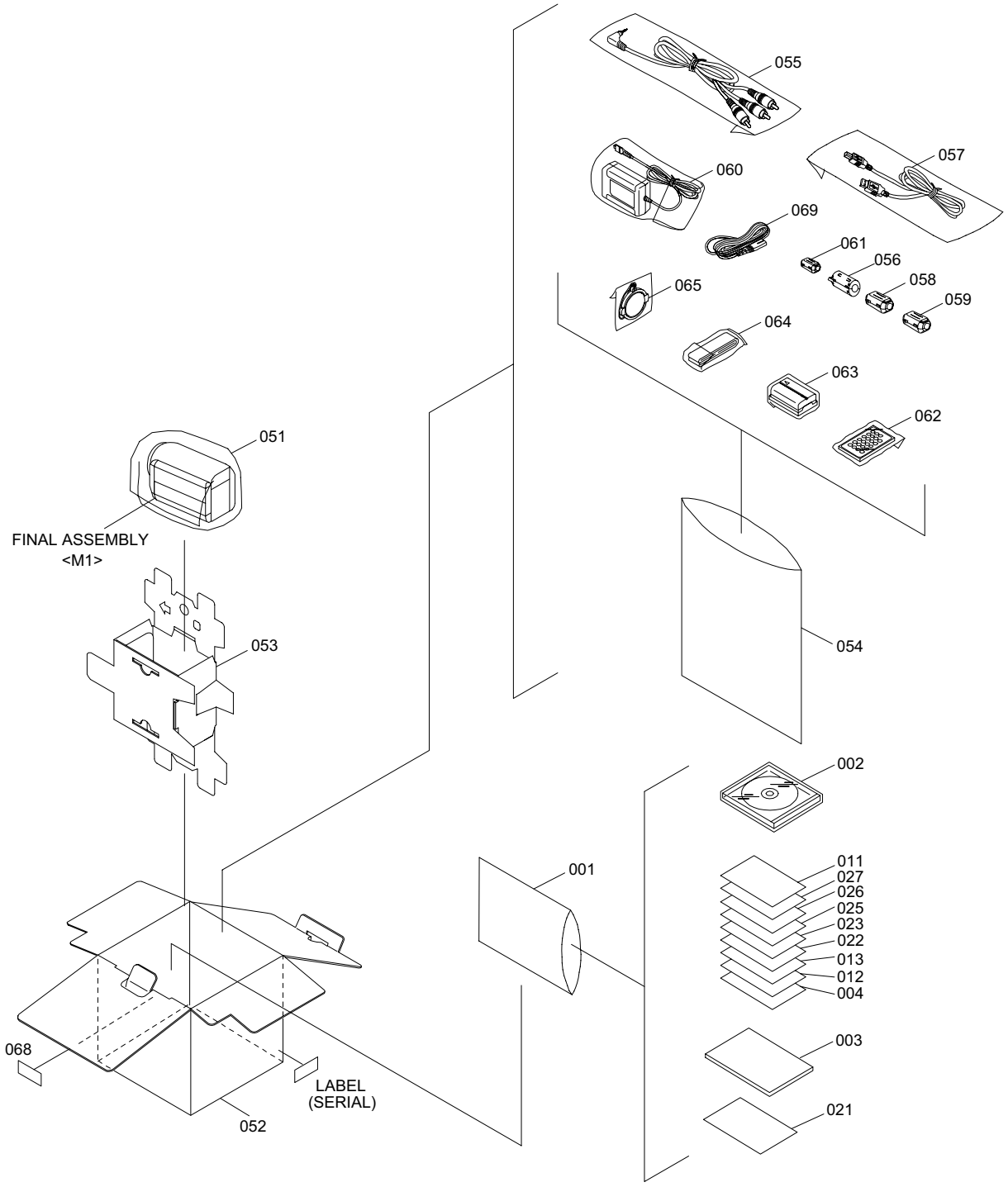
306

1.2 PACKING AND ACCESSORY ASSEMBLY <M5>



MODEL	MARK	MODEL	MARK	MODEL	MARK
GZ-MG67EX	A	GZ-MG77EK	D	GZ-MG77EZ	G
GZ-MG67EY	B	GZ-MG77EX	E		
GZ-MG67EZ	C	GZ-MG77EY	F		

2. PARTS LIST

FINAL ASSEMBLY <M1>

⚠	Symbol No.	Part No.	Part Name	Description	Local
	101	LY35263-002C	FRAME ASSY		
	101A	LY35308-001A	BKT(FRAME)		
	101B	LY30035-030A	SPACER(A)		
	101C	LY30031-0K7A	SPECIAL SCREW		
	102	LY30031-0K7A	SPECIAL SCREW	FRM-OP(x3)	
	104	LY30031-0K7A	SPECIAL SCREW	MAIN-FRM(x2)	
	106	LY35256-001A	SHIELD(FRAME)		
	107	LY30031-0K7A	SPECIAL SCREW	SHIELD-FRM	
	108	LY35276-001A	HOOD(MEGA)		
	109	LY35277-001A	RING(MEGA)		
	110	LY35278-001B	F.COVER (M)ASSY		
	110A	LY30035-031A	SPACER(A)		
	113	LY35303-001A	MIC		
	114	LY35307-001A	BKT(MIC-M)		
	115	LY30031-0L8B	SPECIAL SCREW	BKT(MIC-FR(x2)	
	116	LY30031-0K7A	SPECIAL SCREW	FRONT-FRM	
⚠	120	LY21491-001C	REAR UNIT		
	122	LY30031-0K7A	SPECIAL SCREW	REAR-FRM(x4)	
	123	LY21485-001A	TOP COVER(ZOOM)		
	124	LY34990-001E	ZOOM UNIT		
	125	LY30031-0L8B	SPECIAL SCREW	ZOOM-TOP(Z)(x2)	
	126	LY30031-0K7A	SPECIAL SCREW	TOP(Z)-FRM	
	128	LY30031-0K7A	SPECIAL SCREW	HCASE-FRM(x2)	
	129	LY30031-0L8B	SPECIAL SCREW	HCASE-ZOOM	
	130	LY30031-0L8B	SPECIAL SCREW	HCASE-REAR	
	131	LY30031-0K7A	SPECIAL SCREW	FRONT-HCAS	
	132	QAL0885-001	HDD	20G	A,B,C
	132	QAL0885-002	HDD	30G	D,E,F,G
	133	LY35388-001B	BKT(HDD)U ASSY		
	133A	LY30035-033A	SPACER(A)		
	134	LY35243-001A	BKT(HDD)ASSY		
	134A	LY35244-001A	SHEET(HDD)		
	135	LY35245-001A	GEL	(x2)	
	136	LY35246-014B	HDD COVER ASSY		
	136A	LY45210-001A	SHEET(HDD C.)		
	136B	LY35312-001A	STICKER(HDD)		
	137	LY30031-0K7A	SPECIAL SCREW	HCOV-HOOK	
	138	LY30031-0K7A	SPECIAL SCREW	REAR(B-FRM)	
	140	LY21494-001A	STROBE UNIT		
	141	LY30031-0K7A	SPECIAL SCREW	STBO-FRM(x2)	
	142	LY30031-0L8B	SPECIAL SCREW	FR(M-HOD(M)(x3)	
	143	LY30031-0K7A	SPECIAL SCREW	BKTFT-RI(M)	
	145	LY30031-0K7A	SPECIAL SCREW	BKTFT-FRM	
	146	LY30031-0K7A	SPECIAL SCREW	BKTM-BKTFR	
	147	LY30031-0K7A	SPECIAL SCREW	UPPER-FRM(x3)	
	148	LY30031-0L8B	SPECIAL SCREW	HCASE-STBO	
	158	LY35379-001B	SHIELD M ASSY		
	158A	LY35378-001B	SHEET(S.MAIN)		
	159	LY30031-0K7A	SPECIAL SCREW	SHILDM-FRM(x2)	
	160	LY34189-018A	GASCKET	SD	
	161	LY45202-001A	SHIELD(ZOOM)		
	163	LY34189-020A	GASCKET	FPC	
	164	LY34189-022A	GASCKET		
	201	LY35247-001B	B.COVER ASSY		
	202	LY30031-0K7A	SPECIAL SCREW	BOTTOM(x3)	
	203	LY35239-001A	JACK COVER(DC)		
	204	LY35233-001A	JACK COVER(REAR)		
	250	LY35315-004J	UPPER ASSY	FOR JVM SA	D,E,F,G
	250	LY35315-005J	UPPER ASSY	FOR JVM SA	A,B,C
	251	QAL0806-001	FPC	MOMI-OPE	
	252	LY35075-001A	HINGE UNIT	YEM	
	253	LY35219-003C	HINGE COVER(U)		
	254	LY43413-001A	P.C.MAGNET		
	255	LY35220-001C	HINGE COVER(L)		
	256	LY30031-0K7A	SPECIAL SCREW	HCOV-HINGE(x2)	
	257	LY35213-010C	MONI.CASE ASSY		
	258	LY21475-001B	LCD BKT(WIDE)	16:9	
	259	QLD0417-002	LCD MODULE	16:9	
	260	QLL0178-002	BACK LIGHT	16:9	
	262	LY45193-001A	SPACER(CURSOL)		
	263	LY45166-001C	KNOB(CURSOL)		
	264	LY30031-0L8B	SPECIAL SCREW	PWB-M.CASE(x2)	
	265	LY35221-010D	MONI.COVER ASSY		D,E,F,G
	265	LY35221-011D	MONI.COVER ASSY		A,B,C

⚠	Symbol No.	Part No.	Part Name	Description	Local
	265A	LY45165-002A	MARK(HDD)		
	265B	LY45126-001B	JVC MARK		
	265C	LY45216-001A	PROTECT SHEET		
	265D	LY35260-005A	STICKER		D,E,F,G
	265D	LY35260-006A	STICKER		A,B,C
	266	LY30031-0K6A	SPECIAL SCREW	MCOV-HINGE(x2)	
	267	LY30031-0K7A	SPECIAL SCREW	MCOV-LBKT	
	268	LY21478-008D	U.CASE ASSY		
	268A	LY42350-001A	FOOT	(x3)	
	269	QAS0429-001	SPEAKER		
	270	LY35416-001A	BKT(UPPER)ASSY		
	270A	LY30035-039A	SPACER(A)		
	271	LY30031-0K7A	SPECIAL SCREW	UC-BKT(U)(x4)	
	272	LY35274-003C	T.COVER(U-M)ASSY		
	272A	LY35235-201A	INDICATOR		
	272B	LY30031-0K7A	SPECIAL SCREW		
	272C	LY30034-0T8A	SPACER(A)		
	273	LY35224-003C	POWER SW ASSY		
	274	LY30031-0D4A	SPECIAL SCREW	POW-TOP(U)(x2)	
	275	LY30031-0D4A	SPECIAL SCREW	BKT(U-TOP)(x2)	
	277	LY30031-060A	SPECIAL SCREW	PWB-UPPER(x3)	
	278	LY30031-0K6A	SPECIAL SCREW	HING-BKT(U)(x2)	
	279	LY30031-060A	SPECIAL SCREW	FPC-UPPER	
	280	LY35236-001A	INTERRUPTER		
	281	LY30031-0D4A	SPECIAL SCREW	INTER-TOP	
	283	LY35279-001C	COVER(HINGE-M)		
	284	LY30031-0A3A	SPECIAL SCREW	UP-COV(HIG)(x2)	
	285	LY45196-001A	HEAT SHEET		
	286	LY35215-003C	M.L.CASE ASSY		
	287	LY30031-0L8B	SPECIAL SCREW	MLOCK-UPPE(x2)	
	288	LY34189-021A	GASCKET		
⚠	300	CU06E603A	C(BELT)UNITASSY	FOR JAPAN	
⚠	301	LY35238-005C	HDD CASE ASSY		
	301A	LY35022-201A	BKT(BOTTOM)		
	301B	LY35241-001A	HOOK(G.B)		
	301C	LY30031-0L6A	SPECIAL SCREW	BKT(BTM)	
	301D	LY30031-0L6A	SPECIAL SCREW	HOOK	
	301E	LY30035-028A	SPACER(A)		
	301F	LY30035-029A	SPACER(A)		
	302	LY21416-001B	GRIP BELT		
	303	LY34997-001A	SHAFT(G.B)		
	304	LY35240-001B	BUTTON(TRIG)		
	305	LY35242-001B	HOLDER(SHAFT)		
	306	LY30031-0L8B	SPECIAL SCREW	HOLDER(SH)(x2)	
	316	LY30035-037A	SPACER(A)	TOP(U-M)AY	
	351	J5G-101A	OP BLOCK ASSY	SET030-300	
	351A	LY33302-002A	ZOOM MOTOR		
	351B	LY33303-002A	FOCUS MOTOR		
	351C	LY33304-003A	IRIS MOTOR UNIT		
	351D	LY30727-008A	TAPPING SCREW	(x7)	
	352	LY45185-001A	OPTICAL LPF	SET 010	
	353	LY45186-001A	SHEET	SET 010	
	354	LY35264-001B	BKT(OP)ASSY	SET 010	
	354A	LY42796-001A	BUSH	SET 010(x4)	
	355	LYH30669-001A	CCD BASE ASSY		
	356	QYSPSGU1750ZA	TAP SCREW	SET 010 M1.7 x 5mm(x2)	
	357	LY35266-201A	SHIELD(CCD)MEGA	FOR JPN	
	358	LY35311-001A-ML	HEAT SHEET(CCD)	JPN	
	359	LY30032-007A	SPECIAL SCREW	SET 010(x2)	
	360	LY42424-001B	SPECIAL SCREW	SET 010(x2)	
	362	LY30035-021A	SPACER(A)		
	363	LY30035-022A	SPACER(A)		
	364	LY30035-023A	SPACER(A)		
	365	LY30035-040A	SPACER(A)		

PACKING AND ACCESSORY ASSEMBLY <M5>

⚠	Symbol No.	Part No.	Part Name	Description	Local
	001	LY34452-001A	POLY BAG	DOCUMENT	
	002	LY35273-003A-S	CD ROM ASSY		
⚠	003	LYT1543-001B	INST BOOK(EN)	(ENGLISH)	D
⚠	003	LYT1543-002B	INST BOOK(GE)	(GERMAN)	A,B,E,F
⚠	003	LYT1543-003B	INST BOOK(FR)	(FRENCH)	A,E

MODEL	MARK	MODEL	MARK	MODEL	MARK
GZ-MG67EX	A	GZ-MG77EK	D	GZ-MG77EZ	G
GZ-MG67EY	B	GZ-MG77EX	E		
GZ-MG67EZ	C	GZ-MG77EY	F		

⚠ Symbol No.	Part No.	Part Name	Description	Local
⚠ 003	LYT1543-004B	INST BOOK(DU)	(DUTCH)	A,E
⚠ 003	LYT1543-005B	INST BOOK(SP)	(SPANISH)	A,E
⚠ 003	LYT1543-006B	INST BOOK(IT)	(ITALIAN)	A,E
⚠ 003	LYT1543-007B	INST BOOK(DA)	(DANISH)	B,F
⚠ 003	LYT1543-008B	INST BOOK(FI)	(FINN)	B,F
⚠ 003	LYT1543-009B	INST BOOK(SW)	(SWEDISH)	B,F
⚠ 003	LYT1543-010B	INST BOOK(NO)	(NORWEGIAN)	B,F
⚠ 003	LYT1543-011B	INST BOOK(RU)	(RUSSIAN)	C,G
⚠ 003	LYT1543-012B	INST BOOK(CZ)	(CZECH)	C,G
⚠ 003	LYT1543-013B	INST BOOK(PO)	(PORTUGUESE)	C,G
⚠ 003	LYT1543-014B	INST BOOK(HU)	(HUNGARIAN)	C,G
⚠ 003	LYT1543-015B	INST BOOK(PT)	(PORTUGUESE)	A,E
004	LYT1538-001A	INST BOOK(SOFT.EN)	(SOFT.ENGLISH)	D
004	LYT1538-002B	INST BOOK(SOFT.GEFRDU)	(SOFT.GERMAN FRENCH DUTCH)	A,E
004	LYT1538-003A	INST BOOK(SOFT.SPITPT)	(SOFT.SPANISH ITALIAN PORTUGUESE)	A,E
004	LYT1538-004A	INST BOOK(SOFT.GEDAFI)	(SOFT.GERMAN DANISH FINN)	B,F
004	LYT1538-005A	INST BOOK(SOFT.SWNO)	(SOFT.SWEDISH NORWEGIAN)	B,F
004	LYT1538-006A	INST BOOK(SOFT.RUCZ)	(SOFT.RUSSIAN CZECH)	C,G
004	LYT1538-007A	INST BOOK(SOFT.POHU)	(SOFT.PORTUGUESE HUNGARIAN)	C,G
011	----------	WARRANTY CARD	BT-54029-1CAM	
012	LYT0194-001B	Q.CARD		D
013	YU30878	REGI. CARD		D
021	LY35385-003A	SHEET(ACC GUIDE)		
022	LYT1600-001A	SHEET(DVD.W.EN)		D
022	LYT1600-002A	SHEET(DVD.W.GE)		A,B,E,F
022	LYT1600-003A	SHEET(DVD.W.FR)		A,E
022	LYT1600-004A	SHEET(DVD.W.DU)		A,E
022	LYT1600-005A	SHEET(DVD.W.SP)		A,E
022	LYT1600-006A	SHEET(DVD.W.IT)		A,E
022	LYT1600-007A	SHEET(DVD.W.DA)		B,F
022	LYT1600-008A	SHEET(DVD.W.FI)		B,F
022	LYT1600-009A	SHEET(DVD.W.SW)		B,F
022	LYT1600-010A	SHEET(DVD.W.NO)		B,F
022	LYT1600-011A	SHEET(DVD.W.RU)		C,G
022	LYT1600-012A	SHEET(DVD.W.CZ)		C,G
022	LYT1600-013A	SHEET(DVD.W.PO)		C,G
022	LYT1600-014A	SHEET(DVD.W.HU)		C,G
022	LYT1600-018A	SHEET(DVD.W.PT)		A,E
023	LYT1601-001A	SHEET(DVD.M.EN)		D
023	LYT1601-002A	SHEET(DVD.M.GE)		A,B,E,F
023	LYT1601-003A	SHEET(DVD.M.FR)		A,E
023	LYT1601-004A	SHEET(DVD.M.DU)		A,E
023	LYT1601-005A	SHEET(DVD.M.SP)		A,E
023	LYT1601-006A	SHEET(DVD.M.IT)		A,E
023	LYT1601-007A	SHEET(DVD.M.DA)		B,F
023	LYT1601-008A	SHEET(DVD.M.FI)		B,F
023	LYT1601-009A	SHEET(DVD.M.SW)		B,F
023	LYT1601-010A	SHEET(DVD.M.NO)		B,F
023	LYT1601-011A	SHEET(DVD.M.RU)		C,G
023	LYT1601-012A	SHEET(DVD.M.CZ)		C,G
023	LYT1601-013A	SHEET(DVD.M.PO)		C,G
023	LYT1601-014A	SHEET(DVD.M.HU)		C,G
023	LYT1601-018A	SHEET(DVD.M.PT)		A,E
025	LY35208-001A	SHEET(E-SHOP)		D
026	LYT1602-001A	SHEET(ATT.EN)		D
026	LYT1602-002A	SHEET(ATT.GE)		A,B,E,F
026	LYT1602-003A	SHEET(ATT.FR)		A,E
026	LYT1602-004A	SHEET(ATT.DU)		A,E
026	LYT1602-005A	SHEET(ATT.SP)		A,E
026	LYT1602-006A	SHEET(ATT.IT)		A,E
026	LYT1602-007A	SHEET(ATT.DA)		B,F
026	LYT1602-008A	SHEET(ATT.FI)		B,F
026	LYT1602-009A	SHEET(ATT.SW)		B,F
026	LYT1602-010A	SHEET(ATT.NO)		B,F
026	LYT1602-011A	SHEET(ATT.RU)		C,G
026	LYT1602-012A	SHEET(ATT.CZ)		C,G
026	LYT1602-013A	SHEET(ATT.PO)		C,G
026	LYT1602-014A	SHEET(ATT.HU)		C,G
026	LYT1602-018A	SHEET(ATT.PT)		A,E
027	LYT1607-001A	SHEET(ATT.)		
051	LY30023-003A	POLY BAG	FOR YSK	
052	LY35251-011A	PACKING CASE	PRODUCTION	
053	LY21420-001A	CUSHION		
054	QPA02503505P	POLY BAG	ACC. 25cm x 35cm	
055	QAM0508-001	A/V CABLE	FILTER	
056	QQR0918-004	CORE FILTER	AV	
057	QAM0719-001	USB CABLE		
058	QQR0491-004	CORE FILTER	USB 1T	
059	QQR0491-004	CORE FILTER	S 1T	
⚠ 060	LY21104-001E	AC ADAPTER	AP-V14E	D
⚠ 060	LY21343-001B	AC ADAPTER	AP-V17E	A,B,C,E,F,G
061	QQR0917-004	CORE FILTER	DC	
062	LY21430-003A	REMOTE CTL UNIT	RM-V730UE	
⚠ 063	LY34647-002B	BATTERY PACK	BN-VF707U	
064	LY21397-002A	SHOULDER STRAP		
065	LY33693-002A	CAP(HOOD)ASSY		
068	LY45161-002A-ML	LABEL	JPN	
⚠ 069	QMPP210-190-JR	POWER CORD	BS PLUG 1.9m BLACK	D

MAIN BOARD ASSEMBLY <01>

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LYA10072-02B	MAIN BOARD ASSY		
IC121	NAL0035-001X	SHOCK SENSOR		
IC171	KSM-2003LN2E	IR DETECT UNIT		
IC1001	MN102H60GJD	IC(MICRO C ROM)	MASK	
IC1001 or	MN102HF60GJD	IC(MICRO C ROM)	MP FLASH	
IC1002	RS5C314-X	IC		
IC1003	S-80827CNNB-G-W	IC		
IC1004	SN74AHC1G08DC-X	IC		
IC1004 or	74AHC1G08GW-X	IC		
IC1004 or	TC7SH08FU-X	IC(DIGITAL)		
IC1005	SN74AHC1G04DC-X	IC		
IC1005 or	TC7SH04FU-X	IC(DIGITAL)		
IC1007	TC75S56FU-X	IC		
IC1007 or	NJU7108F3-X	IC		
IC2201	AK4660VQ	IC	48P0.5	
IC2201 or	AK4664VQ	IC		
IC3001	UPD61152F1-A03	IC(MICRO C ROM)		
IC3002	K4S28323LF-HN75	IC	128M 32BIT	
IC3201	JCP8075	IC		
IC3202	MB90099PFV139EX	IC(MICRO C ROM)		
IC3204	R1100D251C-X	IC		
IC3701	BH7612FV-X	IC		
IC4001	SIP1280ISD-DVA3	IC		
IC4301	SP32J55BFI12D40	IC(MICRO C ROM)	4M FLASH	
IC4302	39VF1674CB3KF40	IC(MICRO C ROM)	2M FLASH	
IC4303	K4S56323LF-HN75	IC	256M FBGA	
IC4304	R1114N251B-X	IC	SREG2.5V	
IC4501	JCY0209-2	IC		
IC4502	M95320-WDW6-X	IC	ST EEPROM	
IC4502 or	AT25320A-10TU-X	IC	ATMEL EEPR	
IC4901	JCY0223-X	IC		
IC8301	JCY0225	IC	EPSON	
IC8302	TPS2055AD-X	IC	USB POWER	
IC8303	R1114N181B-X	IC	SREG 1.8V	
Q171	RPM-22PB	PHOTO TRANSISTOR		
Q201	2SA1577/QR/-X	TRANSISTOR		
Q201 or	BC807-25W-X	TRANSISTOR		
Q202	UMX1N-W	PAIR TRANSISTOR		
Q202 or	PUMX1-W	PAIR TRANSISTOR		
Q202 or	BC847S-X	PAIR TRANSISTOR		
Q202 or	XP4501-W	TRANSISTOR		
Q1001	DTC124EE-X	DIGI TRANSISTOR		
Q1002	2SC4617/RS/-X	TRANSISTOR		
Q1002 or	2SD2216J/RS/-X	TRANSISTOR		
Q1002 or	BC847BT-X	TRANSISTOR		
Q1003	DTA124EE-X	DIGI TRANSISTOR		
Q1004	2SC5658/QRS/-X	TRANSISTOR		
Q1005	2SJ347-X	MOS FET		
Q1006	DTA124EE-X	DIGI TRANSISTOR		
Q2202	UMX18N-W	PAIR TRANSISTOR		
Q2401	2SC4617/QR/-X	TRANSISTOR		
Q2401 or	BC847BT-X	TRANSISTOR		
Q2403	2SC4617/QR/-X	TRANSISTOR		
Q2403 or	BC847BT-X	TRANSISTOR		
Q3202	2SC4617/QR/-X	TRANSISTOR		
Q3202 or	BC847BT-X	TRANSISTOR		
Q3701	PUMZ1-W	PAIR TRANSISTOR		
Q3701 or	UMZ1N-W	PAIR TRANSISTOR		
Q3701 or	XP4601-W	TRANSISTOR		

MODEL	MARK	MODEL	MARK	MODEL	MARK
GZ-MG67EX	A	GZ-MG77EK	D	GZ-MG77EZ	G
GZ-MG67EY	B	GZ-MG77EX	E		
GZ-MG67EZ	C	GZ-MG77EY	F		

⚠ Symbol No.	Part No.	Part Name	Description	Local
Q4001	2SC4617/RS/-X	TRANSISTOR		
Q4001	or BC847BT-X	TRANSISTOR		
Q4001	or 2SD2216J/RS/-X	TRANSISTOR		
Q7801	UMX1N-W	PAIR TRANSISTOR		
Q7801	or BC847S-X	PAIR TRANSISTOR		
Q7801	or PUMX1-W	PAIR TRANSISTOR		
Q7801	or XP4501-W	TRANSISTOR		
Q7802	UMX1N-W	PAIR TRANSISTOR		
Q7802	or BC847S-X	PAIR TRANSISTOR		
Q7802	or PUMX1-W	PAIR TRANSISTOR		
Q7802	or XP4501-W	TRANSISTOR		
Q7803	UMX1N-W	PAIR TRANSISTOR		
Q7803	or BC847S-X	PAIR TRANSISTOR		
Q7803	or PUMX1-W	PAIR TRANSISTOR		
Q7803	or XP4501-W	TRANSISTOR		
Q8303	EMD2-W	PAIR TRANSISTOR		
⚠ D191	RB715W-X	SB DIODE		
D1001	DA221-X	DIODE ARRAY		
D1002	1SS376-X	SI DIODE		
D3701	UMZ6.8EN-W	Z DIODE		
D4003	1SS376-X	SI DIODE		
C111	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C122	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C141	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C142	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C171	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C172	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C201	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C202	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C1001	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C1004	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C1005	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1006	NDCA1HJ-7R0W	C CAPACITOR	7pF 50V J	
C1008	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C1013	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C1014	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C1015	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C1016	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C1017	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C1018	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C1020	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C1025	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C1026	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C1031	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C1034	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C1043	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C1044	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C1045	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C1046	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2202	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C2203	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C2204	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C2205	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C2209	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C2210	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C2217	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2218	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2223	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2224	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2401	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C2402	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C2403	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C2404	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C2405	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2406	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C2603	NCBA1CK-223W	C CAPACITOR	0.022uF 16V K	
C2604	NCBA1CK-223W	C CAPACITOR	0.022uF 16V K	
C2605	NCBA1EK-472W	C CAPACITOR	4700pF 25V K	
C2606	NCBA1EK-472W	C CAPACITOR	4700pF 25V K	
C2611	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C2612	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C2613	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C2623	NDCA1HJ-100W	C CAPACITOR	10pF 50V J	
C2624	NDCA1HJ-100W	C CAPACITOR	10pF 50V J	
C2655	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C2656	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C3004	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C3005	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3006	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3007	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3008	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3009	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3010	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3011	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3012	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3013	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3014	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3015	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3016	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3019	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C3020	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3021	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3022	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C3023	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3024	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3201	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3202	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3203	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3204	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3205	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3206	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3207	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3208	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C3209	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3210	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3211	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C3212	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
C3216	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3217	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3218	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3219	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3220	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C3224	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C3225	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C3227	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C3701	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C3702	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C3703	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C3704	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3705	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C3706	NBE20GM-107X	TA E CAPACITOR	100uF 4V M	
C3707	NBE20GM-226X	TA E CAPACITOR	22uF 4V M	
C3708	NBE20GM-226X	TA E CAPACITOR	22uF 4V M	
C3709	NBE20GM-107X	TA E CAPACITOR	100uF 4V M	
C4002	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C4003	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C4004	NBE20GM-476X	TA E CAPACITOR	47uF 4V M	
C4010	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4011	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C4012	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4013	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4014	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C4015	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4016	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4017	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4018	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4019	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4020	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C4021	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4022	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4023	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C4024	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4025	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4026	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4027	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4032	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4034	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4301	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C4302	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4303	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4305	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C4306	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C4307	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4308	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GZ-MG67EX	A	GZ-MG77EK	D	GZ-MG77EZ	G
GZ-MG67EY	B	GZ-MG77EX	E		
GZ-MG67EZ	C	GZ-MG77EY	F		

⚠ Symbol No.	Part No.	Part Name	Description	Local
C4309	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4310	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4351	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C4352	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C4504	NCB20JK-475X	C CAPACITOR	4.7uF 6.3V K	
C4506	NCB20JK-475X	C CAPACITOR	4.7uF 6.3V K	
C4507	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4508	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4510	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4511	NCB20JK-475X	C CAPACITOR	4.7uF 6.3V K	
C4514	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4516	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4518	NCB20JK-475X	C CAPACITOR	4.7uF 6.3V K	
C4521	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4522	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4523	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4525	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4526	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4527	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4528	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4530	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4533	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4534	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4535	NCB20JK-475X	C CAPACITOR	4.7uF 6.3V K	
C4539	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4540	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4902	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C4903	NBE21AM-106X	TA E CAPACITOR	10uF 10V M	
C4905	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4906	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4907	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4908	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4909	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4911	NDCA1HJ-101W	C CAPACITOR	100pF 50V J	
C4912	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4913	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4914	NDCA1HJ-680W	C CAPACITOR	68pF 50V J	
C4915	NDCA1HJ-121W	C CAPACITOR	120pF 50V J	
C4916	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4921	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C4922	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4923	NCB30JK-474X	C CAPACITOR	0.47uF 6.3V K	
C4924	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C4925	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C4926	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4927	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C4932	NBE21AM-106X	TA E CAPACITOR	10uF 10V M	
C4935	NBE21AM-106X	TA E CAPACITOR	10uF 10V M	
C4936	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4937	NDCA1HJ-101W	C CAPACITOR	100pF 50V J	
C7802	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C7803	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C7804	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C7805	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C7806	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C7852	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C8301	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8302	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8303	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8304	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8305	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8306	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8307	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8308	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8309	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8310	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8312	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8314	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8316	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8318	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8319	NDCA1HJ-7R0W	C CAPACITOR	7pF 50V J	
C8320	NDCA1HJ-7R0W	C CAPACITOR	7pF 50V J	
C8322	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8323	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8324	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8325	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8327	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8329	NCB31AK-105X	C CAPACITOR	1uF 10V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C8330	NBE41AM-476X	TA E CAPACITOR	47uF 10V M	
C8331	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C8333	NCB31AK-105X	C CAPACITOR	1uF 10V K	
C8334	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C8335	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C8337	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C8339	NCB31AK-105X	C CAPACITOR	1uF 10V K	
R141	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R142	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R143	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R144	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R145	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R146	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R147	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R148	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R149	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R150	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R151	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R167	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R169	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R170	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R171	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R172	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
⚠ R191	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R196	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R197	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R198	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R202	NRSA6AJ-273W	MG RESISTOR	27kΩ 1/16W J	
R203	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J	
R204	NRSA6AD-182W	MG RESISTOR	1.8kΩ 1/16W D	
R205	NRSA6AD-243W	MG RESISTOR	24kΩ 1/16W D	
R1001	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1003	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R1004	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R1005	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R1006	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R1007	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R1008	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1009	NRSA6AJ-681W	MG RESISTOR	680Ω 1/16W J	
R1010	NRSA6AJ-221W	MG RESISTOR	220Ω 1/16W J	
R1016	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R1017	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1018	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1019	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1020	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1022	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1023	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1024	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1025	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1028	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1029	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1030	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1031	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1037	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1043	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1045	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1051	NRSA6AJ-272W	MG RESISTOR	2.7kΩ 1/16W J	
R1052	NRSA6AJ-183W	MG RESISTOR	18kΩ 1/16W J	
R1053	NRSA6AJ-154W	MG RESISTOR	150kΩ 1/16W J	
R1054	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R1055	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1056	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R1057	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1058	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1059	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1060	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1061	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1062	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1063	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R1064	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1065	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1066	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R1068	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1069	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1070	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1071	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1072	NRSA6AJ-823W	MG RESISTOR	82kΩ 1/16W J	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GZ-MG67EX	A	GZ-MG77EK	D	GZ-MG77EZ	G
GZ-MG67EY	B	GZ-MG77EX	E		
GZ-MG67EZ	C	GZ-MG77EY	F		

⚠ Symbol No.	Part No.	Part Name	Description	Local
R1073	NRSA6AJ-623W	MG RESISTOR	62kΩ 1/16W J	
R1074	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R1075	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1076	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1077	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R1082	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1083	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R1084	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R1085	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R1086	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R2202	NRSA6AJ-564W	MG RESISTOR	560kΩ 1/16W J	
R2203	NRSA6AJ-393W	MG RESISTOR	39kΩ 1/16W J	
R2204	NRSA6AJ-154W	MG RESISTOR	150kΩ 1/16W J	
R2206	NRSA6AJ-333W	MG RESISTOR	33kΩ 1/16W J	
R2207	NRSA6AJ-333W	MG RESISTOR	33kΩ 1/16W J	
R2208	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R2209	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R2210	NRSA6AJ-821W	MG RESISTOR	820Ω 1/16W J	
R2211	NRSA6AJ-821W	MG RESISTOR	820Ω 1/16W J	
R2212	NRSA6AJ-2R7W	MG RESISTOR	2.7Ω 1/16W J	
R2213	NRSA6AJ-2R7W	MG RESISTOR	2.7Ω 1/16W J	
R2217	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R2233	NRSA6AJ-564W	MG RESISTOR	560kΩ 1/16W J	
R2234	NRSA6AJ-564W	MG RESISTOR	560kΩ 1/16W J	
R2235	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
R2241	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R2401	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R2402	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R2403	NRSA6AJ-183W	MG RESISTOR	18kΩ 1/16W J	
R2407	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R2601	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R2602	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R2607	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R2608	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R2609	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R2610	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R3001	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3002	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3003	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3004	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3007	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3008	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3009	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3012	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3013	NRSA6AJ-271W	MG RESISTOR	270Ω 1/16W J	
R3014	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3016	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3017	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3022	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3023	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3024	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3025	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3026	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3027	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3028	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3029	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R3030	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R3031	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R3032	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R3033	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R3034	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R3035	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3036	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3039	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3040	NRSA6AJ-271W	MG RESISTOR	270Ω 1/16W J	
R3041	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3042	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R3043	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R3044	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R3045	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R3046	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3201	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3202	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3203	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3204	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3205	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3206	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3207	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3208	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R3209	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3210	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3211	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3212	NRSA6AD-183W	MG RESISTOR	18kΩ 1/16W D	
R3213	NRSA6AD-123W	MG RESISTOR	12kΩ 1/16W D	
R3214	NRSA6AD-272W	MG RESISTOR	2.7kΩ 1/16W D	
R3215	NRSA6AD-272W	MG RESISTOR	2.7kΩ 1/16W D	
R3216	NRSA6AD-821W	MG RESISTOR	820Ω 1/16W D	
R3217	NRSA6AD-821W	MG RESISTOR	820Ω 1/16W D	
R3221	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3222	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3223	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R3224	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R3701	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3702	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R3703	NRSA6AD-680W	MG RESISTOR	68Ω 1/16W D	
R3708	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R3709	NRSA6AJ-122W	MG RESISTOR	1.2kΩ 1/16W J	
R3710	NRSA6AJ-222W	MG RESISTOR	2.2kΩ 1/16W J	
R4001	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4002	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
R4003	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4005	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4006	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4007	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4008	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4015	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4016	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R4017	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4018	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4019	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4020	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4021	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4023	NRSA6AD-473W	MG RESISTOR	47kΩ 1/16W D	
R4025	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4026	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4027	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4030	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4031	NRSA6AJ-221W	MG RESISTOR	220Ω 1/16W J	
R4032	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4034	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4035	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4036	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4037	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4038	NRSA6AJ-820W	MG RESISTOR	82Ω 1/16W J	
R4039	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J	
R4042	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4043	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4048	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4049	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4050	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4051	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4052	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4053	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4054	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4055	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4056	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4057	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4058	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4059	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4060	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4061	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4062	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4063	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4064	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4065	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4066	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4067	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4068	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4069	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4070	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4071	NRSA6AJ-181W	MG RESISTOR	180Ω 1/16W J	
R4072	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4073	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4074	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4075	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4076	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GZ-MG67EX	A	GZ-MG77EK	D	GZ-MG77EZ	G
GZ-MG67EY	B	GZ-MG77EX	E		
GZ-MG67EZ	C	GZ-MG77EY	F		

⚠ Symbol No.	Part No.	Part Name	Description	Local
R4077	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4078	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4079	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4081	NRSA6AJ-331W	MG RESISTOR	330Ω 1/16W J	
R4083	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R4084	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R4086	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4087	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4088	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4301	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4501	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4503	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4504	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R4506	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R4510	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R4511	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4512	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R4514	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4515	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4516	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4519	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4520	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4521	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R4522	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R4523	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R4531	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4532	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4533	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4534	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4535	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4536	NRSA6AJ-123W	MG RESISTOR	12kΩ 1/16W J	
R4537	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J	
R4538	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4539	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4540	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4548	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4551	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R4552	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R4553	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R4556	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R4557	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R4559	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R4562	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R4563	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R4564	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R4565	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R4566	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4567	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R4570	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4571	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4572	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4573	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4575	NRSA6AJ-223W	MG RESISTOR	22kΩ 1/16W J	
R4576	NRSA6AJ-393W	MG RESISTOR	39kΩ 1/16W J	
R4577	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4579	NRSA6AJ-474W	MG RESISTOR	470kΩ 1/16W J	
R4587	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4588	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4589	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4591	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R4615	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4675	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4676	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4678	NRSA6AJ-331W	MG RESISTOR	330Ω 1/16W J	
R4679	NRSA6AJ-331W	MG RESISTOR	330Ω 1/16W J	
R4680	NRSA6AJ-331W	MG RESISTOR	330Ω 1/16W J	
R4682	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R4903	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J	
R4904	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4905	NRSA6AJ-153W	MG RESISTOR	15kΩ 1/16W J	
R4906	NRSA6AJ-564W	MG RESISTOR	560kΩ 1/16W J	
R4907	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R4908	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R4909	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R4910	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4911	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R4916	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4917	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4919	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4920	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4923	NRSA6AJ-122W	MG RESISTOR	1.2kΩ 1/16W J	
R4924	NRSA6AJ-123W	MG RESISTOR	12kΩ 1/16W J	
R4925	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R4926	NRSA6AJ-333W	MG RESISTOR	33kΩ 1/16W J	
R4927	NRSA6AJ-564W	MG RESISTOR	560kΩ 1/16W J	
R4931	NRSA6AJ-271W	MG RESISTOR	270Ω 1/16W J	
R4942	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4944	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4948	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4949	NRSA6AJ-562W	MG RESISTOR	5.6kΩ 1/16W J	
R4950	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4951	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R4981	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4987	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4988	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4989	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4990	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4992	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4993	NRSA6AJ-471W	MG RESISTOR	470Ω 1/16W J	
R4994	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4998	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R7801	NRSA6AJ-333W	MG RESISTOR	33kΩ 1/16W J	
R7802	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J	
R7803	NRSA6AD-621W	MG RESISTOR	620Ω 1/16W D	
R7804	NRSA6AD-222W	MG RESISTOR	2.2kΩ 1/16W D	
R7805	NRSA6AD-123W	MG RESISTOR	12kΩ 1/16W D	
R7807	NRSA6AJ-682W	MG RESISTOR	6.8kΩ 1/16W J	
R7808	NRSA6AD-621W	MG RESISTOR	620Ω 1/16W D	
R7809	NRSA6AD-222W	MG RESISTOR	2.2kΩ 1/16W D	
R7810	NRSA6AD-123W	MG RESISTOR	12kΩ 1/16W D	
R7812	NRSA6AJ-682W	MG RESISTOR	6.8kΩ 1/16W J	
R7813	NRSA6AD-621W	MG RESISTOR	620Ω 1/16W D	
R7814	NRSA6AD-222W	MG RESISTOR	2.2kΩ 1/16W D	
R7815	NRSA6AD-123W	MG RESISTOR	12kΩ 1/16W D	
R7817	NRSA6AJ-682W	MG RESISTOR	6.8kΩ 1/16W J	
R7851	NRSA6AD-333W	MG RESISTOR	33kΩ 1/16W D	
R7853	NRSA6AD-363W	MG RESISTOR	36kΩ 1/16W D	
R7854	NRSA6AD-333W	MG RESISTOR	33kΩ 1/16W D	
R7856	NRSA6AD-363W	MG RESISTOR	36kΩ 1/16W D	
R7857	NRSA6AD-333W	MG RESISTOR	33kΩ 1/16W D	
R7859	NRSA6AD-363W	MG RESISTOR	36kΩ 1/16W D	
R8301	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8302	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8303	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8304	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8305	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8306	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8307	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8308	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8309	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8310	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8311	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8312	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8313	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8314	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8315	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8316	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8317	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8318	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8319	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8320	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8321	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8322	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R8323	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R8324	NRSA6AJ-820W	MG RESISTOR	82Ω 1/16W J	
R8325	NRSA6AJ-220W	MG RESISTOR	22Ω 1/16W J	
R8326	NRSA6AJ-820W	MG RESISTOR	82Ω 1/16W J	
R8327	NRSA6AJ-820W	MG RESISTOR	82Ω 1/16W J	
R8328	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8329	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8330	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8331	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8332	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8333	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8334	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8335	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GZ-MG67EX	A	GZ-MG77EK	D	GZ-MG77EZ	G
GZ-MG67EY	B	GZ-MG77EX	E		
GZ-MG67EZ	C	GZ-MG77EY	F		

⚠ Symbol No.	Part No.	Part Name	Description	Local
R8336	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R8337	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R8338	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8340	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R8341	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R8342	NRVA6AD-622W	CMF RESISTOR	6.2kΩ 1/16W D	
R8343	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8344	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8348	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8349	NRSA6AJ-330W	MG RESISTOR	33Ω 1/16W J	
R8350	NRSA6AJ-121W	MG RESISTOR	120Ω 1/16W J	
R8351	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R8352	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R8353	NRSA6AJ-562W	MG RESISTOR	5.6kΩ 1/16W J	
R8354	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R8355	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8356	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R8357	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8359	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8364	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8365	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R8367	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
RA3001	NRZ0034-181W	NET RESISTOR	180Ω 1/32W J x4	
RA3002	NRZ0034-181W	NET RESISTOR	180Ω 1/32W J x4	
RA3201	NRZ0034-100W	NET RESISTOR	10Ω 1/32W J x4	
RA3202	NRZ0034-100W	NET RESISTOR	10Ω 1/32W J x4	
RA4001	NRZ0034-221W	NET RESISTOR	220Ω 1/32W J x4	
RA4002	NRZ0034-221W	NET RESISTOR	220Ω 1/32W J x4	
RA4003	NRZ0034-473W	NET RESISTOR	47kΩ 1/32W J x4	
RA4004	NRZ0034-473W	NET RESISTOR	47kΩ 1/32W J x4	
RA4301	NRZ0034-104W	NET RESISTOR	100kΩ 1/32W J x4	
RA4302	NRZ0034-104W	NET RESISTOR	100kΩ 1/32W J x4	
RA4303	NRZ0034-104W	NET RESISTOR	100kΩ 1/32W J x4	
RA4304	NRZ0034-104W	NET RESISTOR	100kΩ 1/32W J x4	
L111	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
L121	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L131	NQR0506-002X	EMI FILTER		
L141	NQR0129-002X	FERRITE BEADS		
L161	NQL38DK-100X	P COIL	10uH K	
L171	NQR0129-002X	FERRITE BEADS		
L1001	NQR0129-002X	FERRITE BEADS		
L1002	NQLC32M-100X	COIL	10uH M	
L2401	NQLC32M-100X	COIL	10uH M	
L2402	NQLC32M-100X	COIL	10uH M	
L2601	NQR0269-013X	FERRITE BEADS		
L2602	NQR0269-013X	FERRITE BEADS		
L2603	NQR0269-013X	FERRITE BEADS		
L3001	NQR0129-002X	FERRITE BEADS		
L3002	NQR0154-003X	FERRITE CORE		
L3005	NQR0006-001X	FERRITE BEADS		
L3007	NQR0129-002X	FERRITE BEADS		
L3201	NQR0129-002X	FERRITE BEADS		
L3203	NQR0129-002X	FERRITE BEADS		
L3206	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
L3701	NQL38DK-100X	P COIL	10uH K	
L4003	NQR0129-002X	FERRITE BEADS		
L4004	NQR0006-001X	FERRITE BEADS		
L4005	NQR0154-003X	FERRITE CORE		
L4008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L4301	NQR0129-002X	FERRITE BEADS		
L4303	NQR0154-003X	FERRITE CORE		
L4501	NQR0006-001X	FERRITE BEADS		
L4503	NQR0006-001X	FERRITE BEADS		
L4504	NQR0006-001X	FERRITE BEADS		
L4505	NQR0006-001X	FERRITE BEADS		
L4506	NQR0006-001X	FERRITE BEADS		
L4901	NQR0129-002X	FERRITE BEADS		
L4902	NQL38DK-100X	P COIL	10uH K	
L4903	NQL38DK-100X	P COIL	10uH K	
L4904	NQL38DK-100X	P COIL	10uH K	
L7801	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
L7851	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
L8301	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L8302	NQR0006-001X	FERRITE BEADS		
L8303	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
L8304	NQR0006-001X	FERRITE BEADS		
L8305	NQR0129-002X	FERRITE BEADS		

⚠ Symbol No.	Part No.	Part Name	Description	Local
CN101	QGF0547C3-50X	CONNECTOR	KIN OPE FFC/FPC (1-50)	
CN102	QGF0508F3-40X	CONNECTOR	KIN HDD FFC/FPC (1-40)	
CN103	QGF0508F3-53X	CONNECTOR	KIN REAR FFC/FPC (1-53)	
CN104	QGF0534F2-06X	CONNECTOR	KIN ZOOM FFC/FPC (1-6)	
CN105	QGF0309F2-53X	CONNECTOR	KIN CDS FFC/FPC (1-53)	
CN106	QGF0547C3-24X	CONNECTOR	KIN OP FFC/FPC (1-24)	
CN107	QGA1001F1-04X	CONNECTOR	INT MIC W-B (1-4)	
CN110	QGB0512L1-30X	CONNECTOR	JIG B-B (1-30)	
CN111	NNZ0156-001X	SD CARD CONNE	SD	
CN112	QGF0549C2-14W	CONNECTOR	KIN STROBE FFC/FPC (1-14)	
CN113	QGA1002C1-04X	CONNECTOR	CDS W-B (1-4)	
J101	QNZ0847-001	USB CONNECTOR	AB USB	
TP1	NNZ0163-001X	EARTH TERMINAL		
TP2	NNZ0163-001X	EARTH TERMINAL		
X1001	NAX0784-001X	C RESONATOR		
X1002	NAX0564-001X	CRYSTAL	32.768kHz	
X4001	NAX0710-001X	CXO		
X8301	NAX0713-001X	CRYSTAL	24MHZ 24.000MHz	
OT1	QAL0807-001	FPC	MAIN-HDD	
OT2	LY30035-025B	SPACER(A)	FPC	
OT3	LY30035-036A	SPACER(A)	PWB	
SD1	LY45207-001A	SHIELD SHEET	SD	
WR1	WJT0197-001A-E	E-CARD WIRE	MAIN-STRB	

CCD BOARD ASSEMBLY <02>

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LYA10073-01C	CCD BOARD ASSY		
Q5201	2SC4083/NP/-X	TRANSISTOR		
Q5202	2SC4082/P/-X	TRANSISTOR		
Q5203	2SC4083/NP/-X	TRANSISTOR		
Q5204	2SC4082/P/-X	TRANSISTOR		
Q5205	2SC4081/RS/-X	TRANSISTOR		
C5205	NCB31HK-222X	C CAPACITOR	2200pF 50V K	
C5206	NBZ0018-106X	TA E CAPACITOR	10uF 20V M	
C5207	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C5208	NCB31CK-105X	C CAPACITOR	1uF 16V K	
R5201	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R5202	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R5203	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5204	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R5205	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R5206	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R5207	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5208	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R5209	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R5210	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L5201	NQL38DK-100X	P COIL	10uH K	
CN201	QGB0801M4-30X	CONNECTOR	B-B (1-30)	

CDS BOARD ASSEMBLY <03>

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LYA10074-01B	CDS BOARD ASSY		
IC4101	AD9972BBCZ	IC		
IC5001	CXD3640ER-X	IC		TG
IC5002	R1100D351C-X	IC		
IC5801	TC75S54FU-X	IC		
IC5801 or	NJU7008F3-X	IC		
IC5801 or	S-89120ANC-G-X	IC		
IC5802	SN74AHC1G66K-X	IC		
IC5802 or	TC7S66FU-X	IC(DIGITAL)		
IC5802 or	74AHC1G66GW-X	IC		
IC5803	TC75S54FU-X	IC		
IC5803 or	NJU7008F3-X	IC		

MODEL	MARK	MODEL	MARK	MODEL	MARK
GZ-MG67EX	A	GZ-MG77EK	D	GZ-MG77EZ	G
GZ-MG67EY	B	GZ-MG77EX	E		
GZ-MG67EZ	C	GZ-MG77EY	F		

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC5803	or S-89120ANC-G-X	IC		
IC5804	TC7W53FU-X	IC(DIGITAL)		
IC5852	NAL0039-001X	GYRO SENSOR		
IC5901	TC75S54FU-X	IC		
IC5901	or NJU7008F3-X	IC		
IC5901	or S-89120ANC-G-X	IC		
IC5902	SN74AHC1G66K-X	IC		
IC5902	or TC7S66FU-X	IC(DIGITAL)		
IC5902	or 74AHC1G66GW-X	IC		
IC5903	TC75S54FU-X	IC		
IC5903	or NJU7008F3-X	IC		
IC5903	or S-89120ANC-G-X	IC		
IC5904	TC7W53FU-X	IC(DIGITAL)		
IC5952	NAL0038-001X	GYRO SENSOR		
D5001	MA111-X	SI DIODE		
C4104	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C4105	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C4106	NCB20JK-475X	C CAPACITOR	4.7uF 6.3V K	
C4107	NCB20JK-475X	C CAPACITOR	4.7uF 6.3V K	
C4108	NCB20JK-475X	C CAPACITOR	4.7uF 6.3V K	
C4109	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4110	NCB20JK-475X	C CAPACITOR	4.7uF 6.3V K	
C4111	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C4112	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C4113	NCB20JK-475X	C CAPACITOR	4.7uF 6.3V K	
C4114	NCB20JK-475X	C CAPACITOR	4.7uF 6.3V K	
C4115	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C4116	NCB20JK-475X	C CAPACITOR	4.7uF 6.3V K	
C4117	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C4118	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C4122	NCB20JK-475X	C CAPACITOR	4.7uF 6.3V K	
C5001	NBZ0018-106X	TA E CAPACITOR	10uF 20V M	
C5002	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C5003	NBP21CM-106X	TA E CAPACITOR	10uF 16V M	
C5004	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5005	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5006	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5007	NCB20JK-475X	C CAPACITOR	4.7uF 6.3V K	
C5008	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5009	NCJ20JK-106X-D	C CAPACITOR	10uF 6.3V K	
C5010	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C5011	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C5012	NCJ20JK-106X-D	C CAPACITOR	10uF 6.3V K	
C5014	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5015	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5016	NCB21HK-334X	C CAPACITOR	0.33uF 50V K	
C5017	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	
C5018	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C5019	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C5801	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C5806	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C5807	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
C5808	NCBA1HK-331W	C CAPACITOR	330pF 50V K	
C5809	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
C5810	NCBA1HK-331W	C CAPACITOR	330pF 50V K	
C5812	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5813	NCBA1HK-331W	C CAPACITOR	330pF 50V K	
C5851	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C5853	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5907	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	
C5908	NCBA1HK-331W	C CAPACITOR	330pF 50V K	
C5909	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
C5910	NCBA1HK-331W	C CAPACITOR	330pF 50V K	
C5912	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C5913	NCBA1HK-331W	C CAPACITOR	330pF 50V K	
R4102	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4103	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4104	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4105	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4106	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4107	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4108	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4109	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4110	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4111	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4112	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4113	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4114	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4116	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4117	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4118	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4119	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4120	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4121	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4122	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4123	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4124	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4125	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4126	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4127	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4128	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R4149	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4151	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R5001	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R5002	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R5003	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R5004	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R5005	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R5006	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R5007	NRSA6AJ-101W	MG RESISTOR	100Ω 1/16W J	
R5008	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R5009	NRSA6AJ-470W	MG RESISTOR	47Ω 1/16W J	
R5010	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R5011	NRSA6AJ-100W	MG RESISTOR	10Ω 1/16W J	
R5012	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R5805	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R5806	NRSA6AJ-474W	MG RESISTOR	470kΩ 1/16W J	
R5807	NRSA6AJ-183W	MG RESISTOR	18kΩ 1/16W J	
R5808	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R5811	NRSA6AJ-123W	MG RESISTOR	12kΩ 1/16W J	
R5812	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R5816	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R5817	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R5818	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R5819	NRSA6AD-104W	MG RESISTOR	100kΩ 1/16W D	
R5820	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D	
R5905	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R5906	NRSA6AJ-474W	MG RESISTOR	470kΩ 1/16W J	
R5907	NRSA6AJ-183W	MG RESISTOR	18kΩ 1/16W J	
R5908	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R5911	NRSA6AJ-123W	MG RESISTOR	12kΩ 1/16W J	
R5912	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R5915	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R5917	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R5918	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R5919	NRSA6AD-104W	MG RESISTOR	100kΩ 1/16W D	
R5920	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D	
L4101	NQR0006-001X	FERRITE BEADS		
L4102	NQR0006-001X	FERRITE BEADS		
L5001	NQL38DK-100X	P COIL	10uH K	
L5002	NQL38DK-100X	P COIL	10uH K	
L5003	NQL38DK-100X	P COIL	10uH K	
L5004	NQR0129-002X	FERRITE BEADS		
L5801	NQR0129-002X	FERRITE BEADS		
L5851	NQR0129-002X	FERRITE BEADS		
CN801	QGB0801L2-30X	CONNECTOR	CCD B-B (1-30)	
CN802	QGF0309F2-53X	CONNECTOR	KIN MAIN FFC/FPC (1-53)	
CN803	QGA1002F1-04X	CONNECTOR	MAIN W-B (1-4)	
TP4101	NNZ0094-001X	EARTH TERMINAL		
X5001	NAX0674-001X	CXO	72.000MHZ	
OT1	QAL0808-001	FPC	CDS-MAIN	
WR1	WJJ0689-001A-E	E-SI C WIRE C-C	ENB -MAIN	

OPE BOARD ASSEMBLY <04>

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LYA10069-02C1	OPE BOARD ASSY		

MODEL	MARK	MODEL	MARK	MODEL	MARK
GZ-MG67EX	A	GZ-MG77EK	D	GZ-MG77EZ	G
GZ-MG67EY	B	GZ-MG77EX	E		
GZ-MG67EZ	C	GZ-MG77EY	F		

⚠ Symbol No.	Part No.	Part Name	Description	Local
D401	SML-A12UT-X	LED	POW/CHG	
D402	SMLA12BC4T-X	LED	DRV_ACCESS	
D403	MA8068-X	Z DIODE	LCD_OPN SW	
D403 or	UDZS6.8B-X	Z DIODE	LCD_OPN SW	
D404	SML-A12MT-X	LED	USB_HOST	
D452	MA8068-X	Z DIODE		
D452 or	UDZS6.8B-X	Z DIODE		
C451	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C452	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C455	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
R401	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R405	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R406	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R407	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R408	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R451	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R452	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R453	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R454	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R455	NRSA63D-680X	MG RESISTOR	68Ω 1/16W D	
R456	NRSA63D-680X	MG RESISTOR	68Ω 1/16W D	
R457	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
L451	NQR0251-004X	FERRITE BEADS		
L452	NQR0251-004X	FERRITE BEADS		
L453	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L454	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L455	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
⚠ BT401	QAB0069-001	LITHIUM BATTERY		
CN401	QGF0547C3-50X	CONNECTOR	MAIN PWB FFC/FPC (1-50)	
CN402	QGF0503F8-24X	CONNECTOR	MONI FPC FFC/FPC (1-24)	
CN403	QGA1001F1-02X	CONNECTOR	SPEAKER W-B (1-2)	
J401	QNS0078-001	3.5 JACK	AV JACK	
J402	QND0078-001	S JACK	S JACK	
S401	NSW0260-001X	SLIDE SWITCH	POWER_CHRG	
S402	NSW0161-001X	DETECT SWITCH	LCD_OPEN	
S403	NSW0099-001X	SLIDE SWITCH	MOV/STILL	
S404	NSW0198-001X	TACT SWITCH	INFO	
S405	NSW0198-001X	TACT SWITCH	BKLIGHT	
S411	NSW0198-001X	TACT SWITCH	NIGHT EYE	
S412	NSW0198-001X	TACT SWITCH	TRASH	
S413	NSW0272-001X	TACT SWITCH	RESET	
WR1	WJT0196-001A-E	E-CARD WIRE	OPE-MAIN	

REAR BOARD ASSEMBLY <05>

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW1	LYA10068-02B	REAR BOARD ASSY		
IC6001	FA7737F	IC		
IC6002	LTC4412ES6-W	IC		
IC6004	S-89220ACNC-G-W	IC		
Q6002	DTC144EE-X	DIGI TRANSISTOR		
Q6002 or	BCR148T-X	DIGI TRANSISTOR		
Q6002 or	UN9213J-X	DIGI TRANSISTOR		
Q6002 or	PDTC144EE-X	DIGI TRANSISTOR		
Q6003	SP8J5-X	MOS FET	SP8J5	
Q6101	RSR025P03-X	MOS FET		
Q6102	RSR025N03-X	MOS FET		
Q6201	RSR025P03-X	MOS FET		
Q6202	RSR025N03-X	MOS FET		
Q6301	RSR025P03-X	MOS FET		
Q6302	RTF020P02-X	MOS FET		
Q6303	2SC4617/QR/-X	TRANSISTOR		
Q6303 or	BC847BT-X	TRANSISTOR		
Q6303 or	2SD2216J/QR/-X	TRANSISTOR		
Q6303 or	2SC4738/YG/-X	TRANSISTOR		
Q6303 or	2SC5383/E/-X	TRANSISTOR		
Q6401	RSR025P03-X	MOS FET		
Q6402	RTF020P02-X	MOS FET		
Q6403	2SC4617/QR/-X	TRANSISTOR		
Q6403 or	BC847BT-X	TRANSISTOR		
Q6403 or	2SD2216J/QR/-X	TRANSISTOR		
Q6403 or	2SC4738/YG/-X	TRANSISTOR		
Q6403 or	2SC5383/E/-X	TRANSISTOR		
Q6404	RTF020P02-X	MOS FET		
Q6501	RSR025P03-X	MOS FET		
Q6502	2SD2703-X	TRANSISTOR		
Q6503	UMT1N-W	PAIR TRANSISTOR		
Q6503 or	HN1A01FU/G/-X	PAIR TRANSISTOR		
Q6503 or	BC856S-X	PAIR TRANSISTOR		
Q6701	RSR025P03-X	MOS FET		
Q6702	RSR025P03-X	MOS FET		
Q6703	RSR025P03-X	MOS FET		
D601	EMZ6.8N-X	Z DIODE	BATT	
D602	UDZS16B-X	Z DIODE		
D6101	RB160M-30-X	SB DIODE		
D6201	RB160M-30-X	SB DIODE		
D6301	RB160M-30-X	SB DIODE		
D6302	1SS355-X	DIODE C.M		
D6302 or	MA111-X	SI DIODE		
D6401	1SS355-X	DIODE C.M		
D6401 or	MA111-X	SI DIODE		
D6402	RB160M-30-X	SB DIODE		
D6501	RB481K-X	SB DIODE		
D6502	RB481K-X	SB DIODE		
D6701	RB160M-30-X	SB DIODE		
D6702	RB160M-30-X	SB DIODE		
D6801	RB551V-30-X	SB DIODE		
D6901	MA8068-X	Z DIODE		
C601	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C603	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C6006	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6007	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6008	NCJ21CK-475X-R	C CAPACITOR	4.7uF 16V K	
C6009	NCB21CK-224X	C CAPACITOR	0.22uF 16V K	
C6010	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C6011	NCJ21CK-475X-R	C CAPACITOR	4.7uF 16V K	
C6017	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6018	NCBA1AK-104W	C CAPACITOR	0.1uF 10V K	
C6019	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C6020	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C6101	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6102	NCB10JK-106X	C CAPACITOR	10uF 6.3V K	
C6103	NCBA1HK-221W	C CAPACITOR	220pF 50V K	
C6104	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C6201	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6202	NCB10JK-106X	C CAPACITOR	10uF 6.3V K	
C6203	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	
C6204	NCBA1HK-221W	C CAPACITOR	220pF 50V K	
C6301	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6302	NCB10JK-106X	C CAPACITOR	10uF 6.3V K	
C6303	NCBA1HK-681W	C CAPACITOR	680pF 50V K	
C6305	NCBA1HK-221W	C CAPACITOR	220pF 50V K	
C6401	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6402	NCB10JK-106X	C CAPACITOR	10uF 6.3V K	
C6403	NCBA1HK-681W	C CAPACITOR	680pF 50V K	
C6405	NCBA1HK-221W	C CAPACITOR	220pF 50V K	
C6501	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6502	NCF21CZ-105X	C CAPACITOR	1uF 16V Z	
C6503	NCB11EK-105X	C CAPACITOR	1uF 25V K	
C6504	NCB11CK-475X	C CAPACITOR	4.7uF 16V K	
C6505	NCF21CZ-105X	C CAPACITOR	1uF 16V Z	
C6506	NCB11EK-105X	C CAPACITOR	1uF 25V K	
C6508	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6509	NCBA1AK-333W	C CAPACITOR	0.033uF 10V K	
C6510	NCBA1AK-473W	C CAPACITOR	0.047uF 10V K	
C6511	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6512	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C6701	NCB21CK-105X	C CAPACITOR	1uF 16V K	
C6702	NCB41CK-106X	C CAPACITOR	10uF 16V K	
C6704	NCBA1EK-472W	C CAPACITOR	4700pF 25V K	
C6705	NCBA1CK-103W	C CAPACITOR	0.01uF 16V K	
C6706	NCBA1HK-221W	C CAPACITOR	220pF 50V K	
C6707	NCBA1HK-821W	C CAPACITOR	820pF 50V K	
C6802	NCB10JK-106X	C CAPACITOR	10uF 6.3V K	
C6803	NCBA1HK-102W	C CAPACITOR	1000pF 50V K	

MODEL	MARK	MODEL	MARK	MODEL	MARK
GZ-MG67EX	A	GZ-MG77EK	D	GZ-MG77EZ	G
GZ-MG67EY	B	GZ-MG77EX	E		
GZ-MG67EZ	C	GZ-MG77EY	F		

⚠ Symbol No.	Part No.	Part Name	Description	Local
C6804	NCBA1HK-392W	C CAPACITOR	3900pF 50V K	
R601	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R602	NRSA6AJ-332W	MG RESISTOR	3.3kΩ 1/16W J	
R603	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R604	NRSA6AD-154W	MG RESISTOR	150kΩ 1/16W D	
R605	NRSA6AD-393W	MG RESISTOR	39kΩ 1/16W D	
R6001	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R6002	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R6003	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R6004	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R6005	NRSA6AD-303W	MG RESISTOR	30kΩ 1/16W D	
R6007	NRSA6AD-473W	MG RESISTOR	47kΩ 1/16W D	
R6008	NRSA6AD-823W	MG RESISTOR	82kΩ 1/16W D	
R6009	NRSA6AD-333W	MG RESISTOR	33kΩ 1/16W D	
R6010	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R6012	NRSA6AJ-564W	MG RESISTOR	560kΩ 1/16W J	
R6014	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R6015	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R6016	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R6017	NRSA6AJ-514W	MG RESISTOR	510kΩ 1/16W J	
R6018	NRSA6AJ-184W	MG RESISTOR	180kΩ 1/16W J	
R6019	NRSA6AJ-824W	MG RESISTOR	820kΩ 1/16W J	
R6021	NRSA6AJ-474W	MG RESISTOR	470kΩ 1/16W J	
R6022	NRSA6AJ-104W	MG RESISTOR	100kΩ 1/16W J	
R6034	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R6102	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R6103	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J	
R6104	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R6109	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R6111	NRSA6AD-473W	MG RESISTOR	47kΩ 1/16W D	
R6112	NRSA6AD-822W	MG RESISTOR	8.2kΩ 1/16W D	
R6203	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R6204	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J	
R6205	NRSA6AD-823W	MG RESISTOR	82kΩ 1/16W D	
R6206	NRSA6AD-363W	MG RESISTOR	36kΩ 1/16W D	
R6301	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R6302	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R6303	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J	
R6304	NRSA6AD-303W	MG RESISTOR	30kΩ 1/16W D	
R6305	NRSA6AD-133W	MG RESISTOR	13kΩ 1/16W D	
R6306	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R6310	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R6311	NRSA6AJ-185W	MG RESISTOR	1.8MΩ 1/16W J	
R6313	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R6401	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R6402	NRSA6AD-123W	MG RESISTOR	12kΩ 1/16W D	
R6403	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J	
R6404	NRSA6AD-562W	MG RESISTOR	5.6kΩ 1/16W D	
R6405	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R6406	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R6407	NRSA6AJ-185W	MG RESISTOR	1.8MΩ 1/16W J	
R6409	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	
R6412	NRSA6AJ-185W	MG RESISTOR	1.8MΩ 1/16W J	
R6502	NRSA6AD-104W	MG RESISTOR	100kΩ 1/16W D	
R6503	NRSA6AD-913W	MG RESISTOR	91kΩ 1/16W D	
R6504	NRSA6AJ-103W	MG RESISTOR	10kΩ 1/16W J	
R6505	NRSA6AJ-333W	MG RESISTOR	33kΩ 1/16W J	
R6507	NRSA6AJ-754W	MG RESISTOR	750kΩ 1/16W J	
R6509	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R6512	NRSA6AJ-473W	MG RESISTOR	47kΩ 1/16W J	
R6513	NRSA6AJ-272W	MG RESISTOR	2.7kΩ 1/16W J	
R6702	NRV142F-R20X	CMF RESISTOR	0.2Ω 1/4W F	
R6703	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R6704	NRSA6AJ-105W	MG RESISTOR	1MΩ 1/16W J	
R6708	NRSA6AD-133W	MG RESISTOR	13kΩ 1/16W D	
R6709	NRSA6AD-104W	MG RESISTOR	100kΩ 1/16W D	
R6710	NRSA6AJ-124W	MG RESISTOR	120kΩ 1/16W J	
R6712	NRSA6AJ-561W	MG RESISTOR	560Ω 1/16W J	
R6713	NRSA6AJ-224W	MG RESISTOR	220kΩ 1/16W J	
R6714	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R6715	NRSA6AD-103W	MG RESISTOR	10kΩ 1/16W D	
R6716	NRSA6AJ-822W	MG RESISTOR	8.2kΩ 1/16W J	
R6717	NRSA6AD-393W	MG RESISTOR	39kΩ 1/16W D	
R6718	NRSA6AJ-0R0W	MG RESISTOR	0Ω 1/16W J	
R6719	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R6802	NRSA6AJ-472W	MG RESISTOR	4.7kΩ 1/16W J	
R6803	NRSA6AJ-102W	MG RESISTOR	1kΩ 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
L6101	NQL52EM-390X	COIL	39uH M	
L6201	NQL52EM-680X	COIL	68uH M	
L6301	NQL52EM-390X	COIL	39uH M	
L6401	NQL52EM-390X	COIL	39uH M	
L6501	NQL52EM-221X	COIL	220uH M	
L6502	NQL38DK-100X	P COIL	10uH K	
L6701	NQL52EM-470X	COIL	47uH M	
L6801	NQL79GM-470X	COIL	47uH M	
CN6001	QGF0508F3-53X	CONNECTOR	KIN MAIN FFC/FPC (1-53)	
CN6002	QGF0534F2-06X	CONNECTOR	KIN TRIG FFC/FPC (1-6)	
⚠ F6001	NMFZ007-2R5X-K	FUSE	2.5A 24V	
⚠ F6002	NMFZ007-2R5X-K	FUSE	2.5A 24V	
⚠ F6301	NMFZ007-1R25X-K	FUSE	1.25A 32V	
⚠ F6501	NMFZ007-R80X-K	FUSE	0.8A 32V	
J601	QNA0039-001	DC JACK	DC JACK	
BT1	LY35291-001A	BATT.TERMINAL	BATT TERMI	
OT1	QAL0782-002	FPC	TO MAIN	

MONITOR BOARD ASSEMBLY <06>

⚠ Symbol No.	Part No.	Part Name	Description	Local
PW2	LYA10069-01B2	MONITOR BOARD ASSY		
IC7601	DN8797MS-X	IC		
Q7702	UMD3N-W	DIGI TRANSISTOR		
Q7703	UMX1N-W	PAIR TRANSISTOR		
Q7703 or	PUMX1-W	PAIR TRANSISTOR		
Q7703 or	BC847S-X	PAIR TRANSISTOR		
Q7703 or	KTC801U/G/-X	PAIR TRANSISTOR		
Q7703 or	RT3CLLM/EF/-X	PAIR TRANSISTOR		
C7602	NCB10JK-106X	C CAPACITOR	10uF 6.3V K	
C7603	NCB31CK-105X	C CAPACITOR	1uF 16V K	
C7604	NCB31CK-105X	C CAPACITOR	1uF 16V K	
C7605	NCB31CK-105X	C CAPACITOR	1uF 16V K	
C7607	NCB11EK-105X	C CAPACITOR	1uF 25V K	
C7608	NCB31CK-105X	C CAPACITOR	1uF 16V K	
C7609	NCB11EK-105X	C CAPACITOR	1uF 25V K	
C7610	NCB11EK-105X	C CAPACITOR	1uF 25V K	
C7611	NCB11EK-105X	C CAPACITOR	1uF 25V K	
C7612	NCB11EK-105X	C CAPACITOR	1uF 25V K	
C7613	NCB31EK-153X	C CAPACITOR	0.015uF 25V K	
C7614	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	
C7703	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C7704	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
R7501	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R7502	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R7503	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R7601	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7603	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7605	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7606	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7607	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
R7608	NRSA63J-106X	MG RESISTOR	10MΩ 1/16W J	
R7609	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7610	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7703	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R7705	NRSA63J-911X	MG RESISTOR	910Ω 1/16W J	
R7706	NRSA63J-200X	MG RESISTOR	20Ω 1/16W J	
L7602	NQL38DK-101X	P COIL	100uH K	
CN7601	QGF0508F3-12X	CONNECTOR	KIN OPE FFC/FPC (1-12)	
CN7602	QGF0508F3-12X	CONNECTOR	KIN OPE FFC/FPC (1-12)	
CN7603	QGF0534F2-36X	CONNECTOR	KIN LCD FFC/FPC (1-36)	
CN7701	QGF0508F3-06X	CONNECTOR	LED BL FFC/FPC (1-6)	
S7501	NSW0288-001X	TACT SWITCH	CROSSKEY	
S7502	NSW0198-001X	TACT SWITCH	MENU	
OT1	QAL0687-001	FPC		

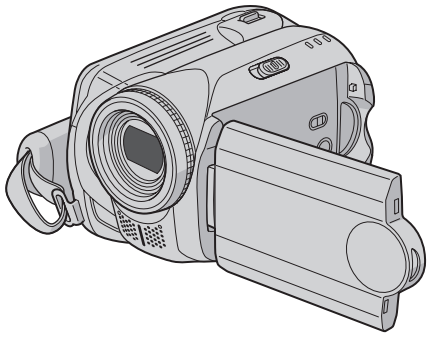
JVC

SCHEMATIC DIAGRAMS

HARD DISK CAMCORDER

GZ-MG67EX, GZ-MG67EY, GZ-MG67EZ, GZ-MG77EK, GZ-MG77EX, GZ-MG77EY, GZ-MG77EZ

CD-ROM No.SML200604



GZ-MG67EXM, GZ-MG67EYM, GZ-MG67EZM [M6E635],
GZ-MG77EKM, GZ-MG77EXM,
GZ-MG77EYM, GZ-MG77EZM [M6E637]

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

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No.YF139SCH
2006/4

CHARTS AND DIAGRAMS

NOTES OF SCHEMATIC DIAGRAM

Safety precautions
The Components indentified by the symbol ⚠ are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.

1. Units of components on the schematic diagram

Unless otherwise specified.

1) All resistance values are in ohm. 1/6 W, 1/8 W (refer to parts list).
   Chip resistors are 1/16 W.
   K: KΩ(1000Ω), M: MΩ (1000KΩ)
2) All capacitance values are in μF, (P: PF).
3) All inductance values are in μH, (m: mH).
4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

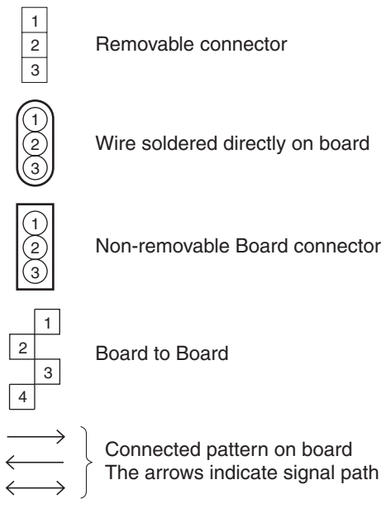
Note: The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

2. Indications of control voltage

AUX : Active at high.

$\overline{AUX}$ or AUX(L) : Active at low.

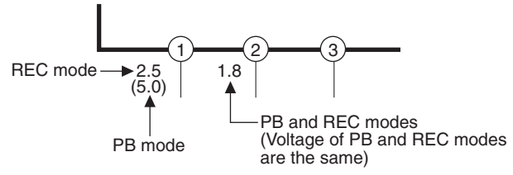
3. Interpreting Connector indications



Note: For the destination of each signal and further line connections that are cut off from the diagram, refer to "BOARD INTERCONNECTIONS"

4. Voltage measurement

1) Regulator (DC/DC CONV) circuits
   REC : Colour bar signal.
   PB : Alignment tape (Colour bar).
   — : Unmeasurable or unnecessary to measure.
2) Indication on schematic diagram
   Voltage indications for REC and PB mode on the schematic diagram are as shown below.

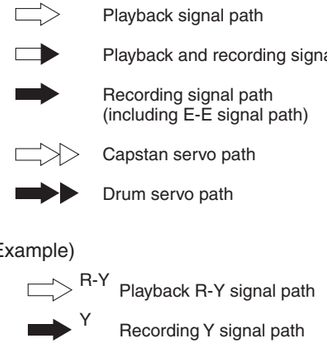


Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

5. Signal path Symbols

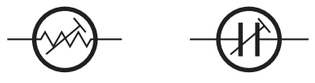
The arrows indicate the signal path as follows.

NOTE : The arrow is DVC unique object.



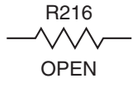
6. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



7. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.



CIRCUIT BOARD NOTES

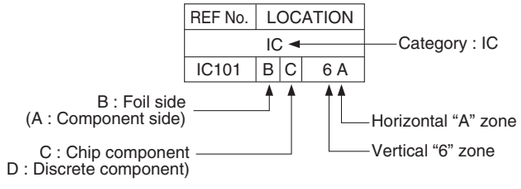
1. Foil and Component sides

1) Foil side (B side) :
   Parts on the foil side seen from foil face (pattern face) are indicated.
2) Component side (A side) :
   Parts on the component side seen from component face (parts face) indicated.

rts location are indicated by guide scale on the circuit board.

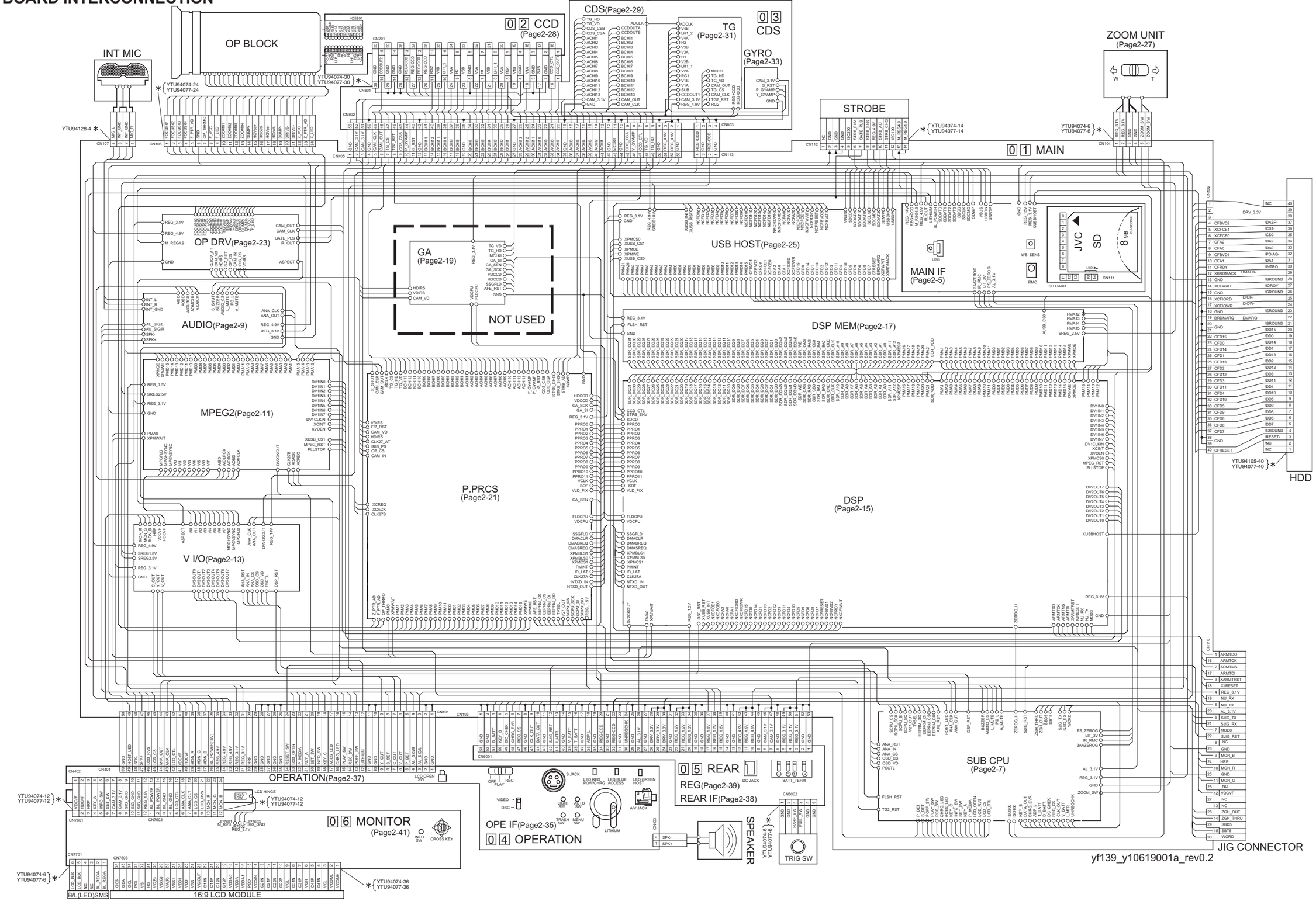
2. Parts location guides

Parts location are indicated by guide scale on the circuit board.



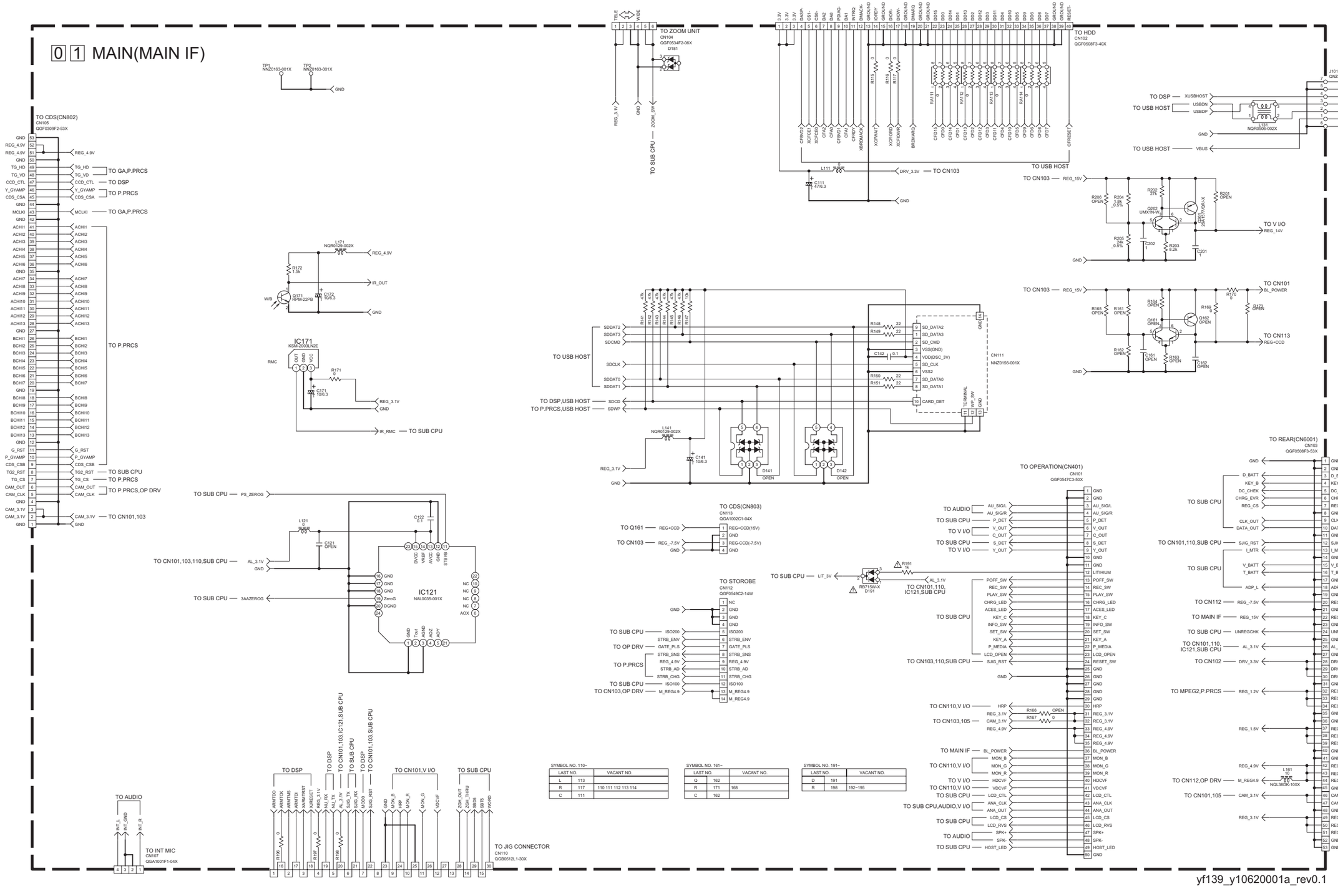
Note: For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).

■ BOARD INTERCONNECTION



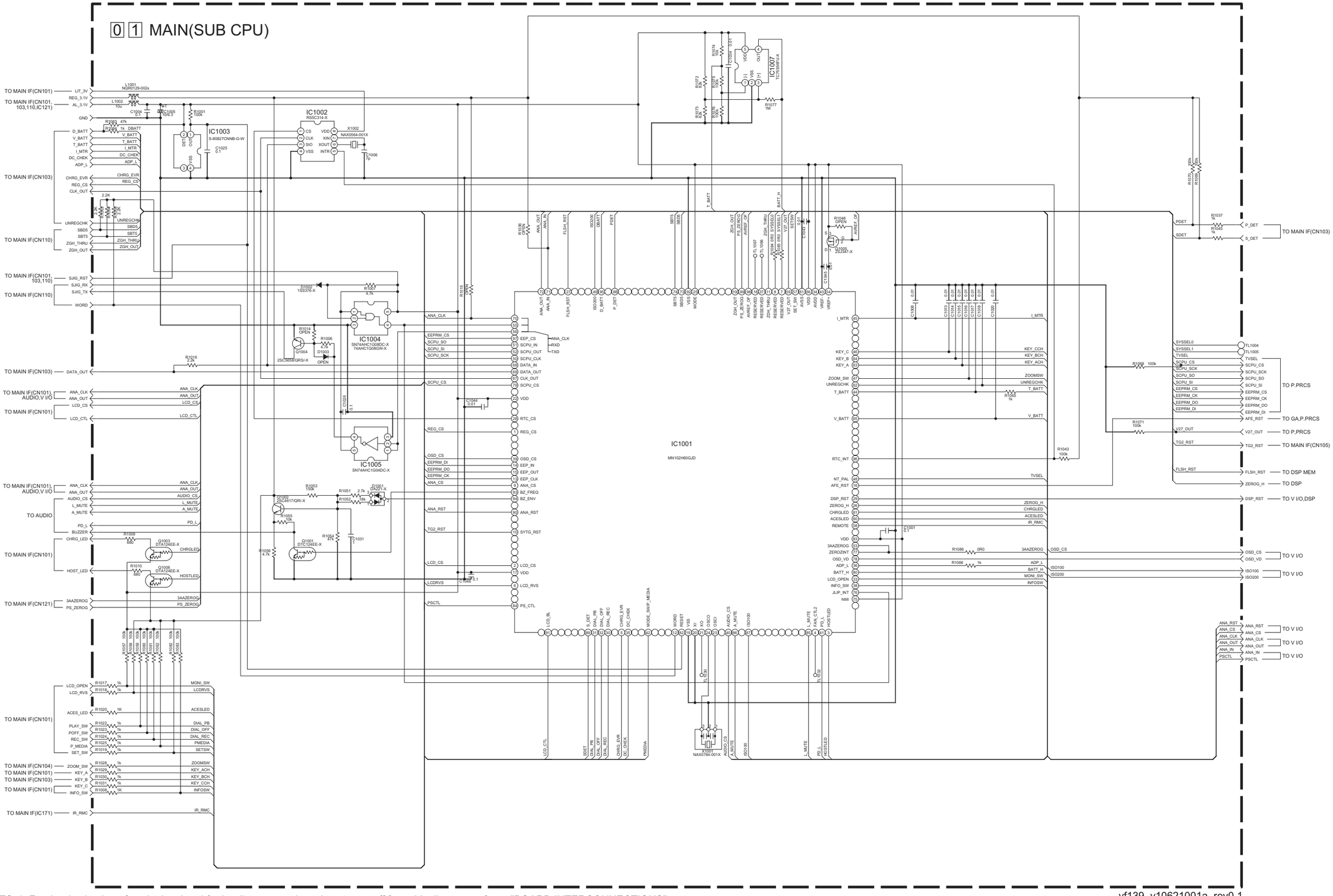
NOTES: The number of patch cords (∗) are indicated by interconnected.

■ MAIN(MAIN IF) SCHEMATIC DIAGRAM



NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

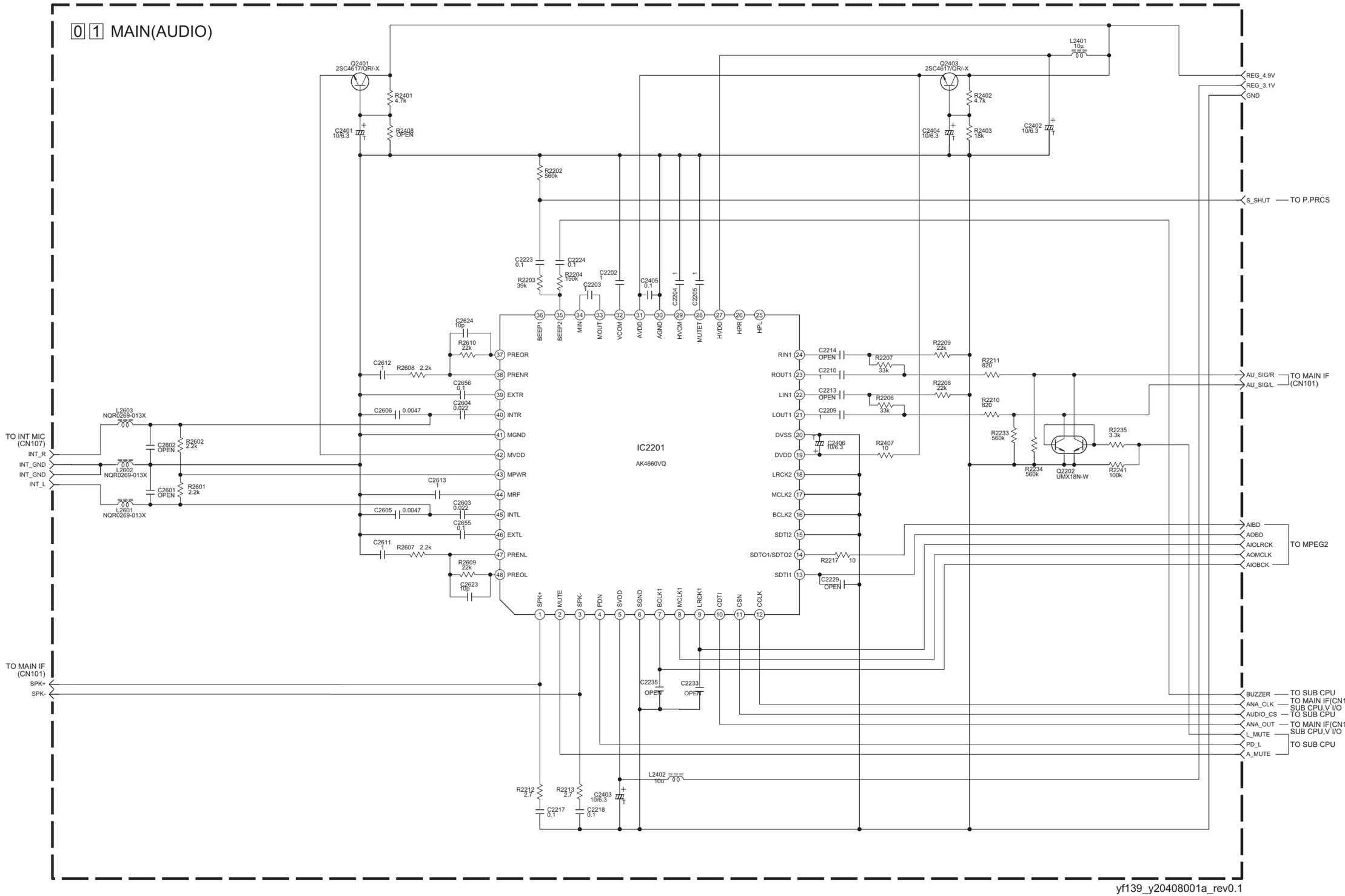
■ MAIN(SUB CPU) SCHEMATIC DIAGRAM



NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

yf139_y10621001a_rev0.1

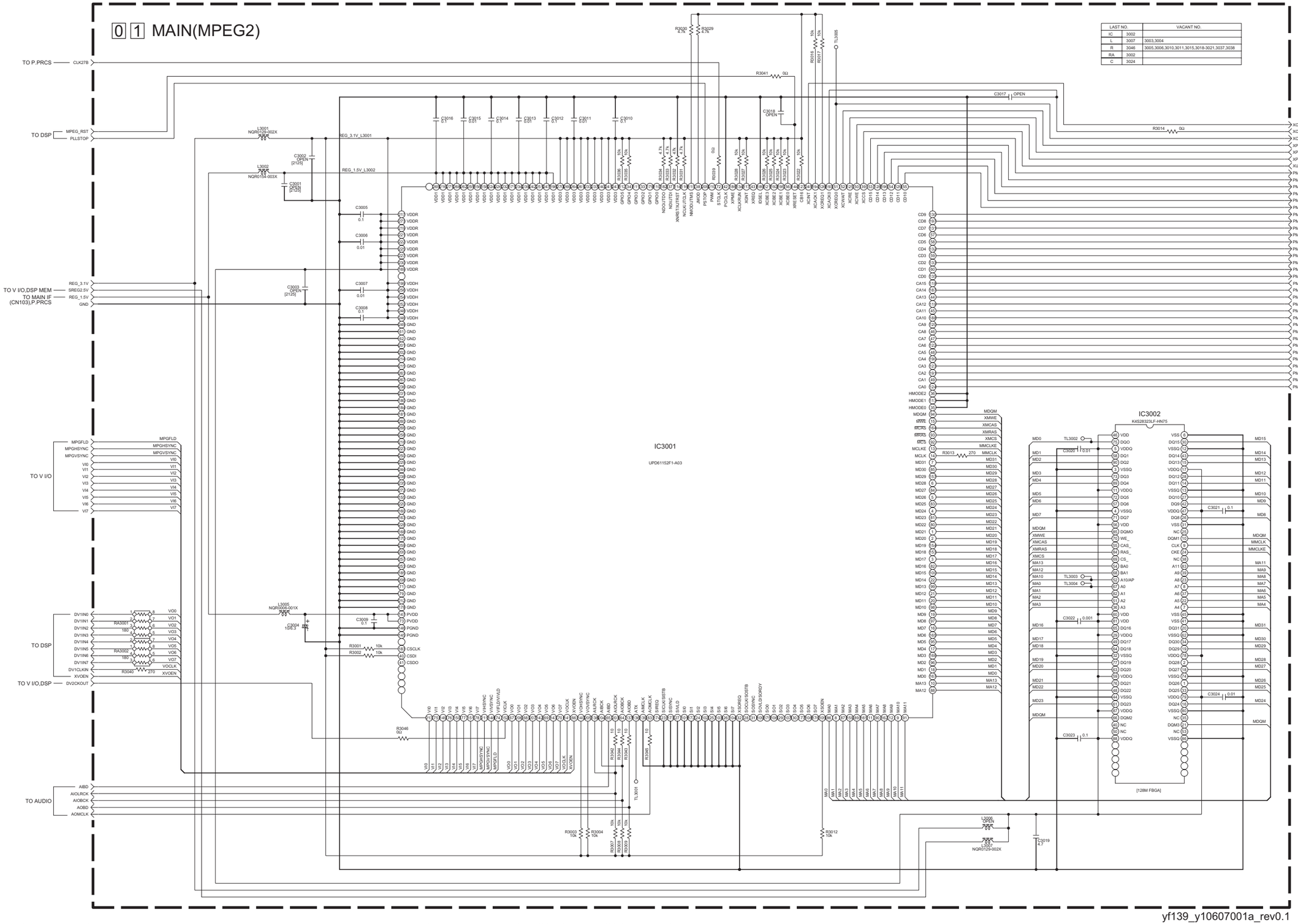
■ MAIN(AUDIO) SCHEMATIC DIAGRAM



yf139_y20408001a_rev0.1

NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

■ MAIN(MPEG2) SCHEMATIC DIAGRAM

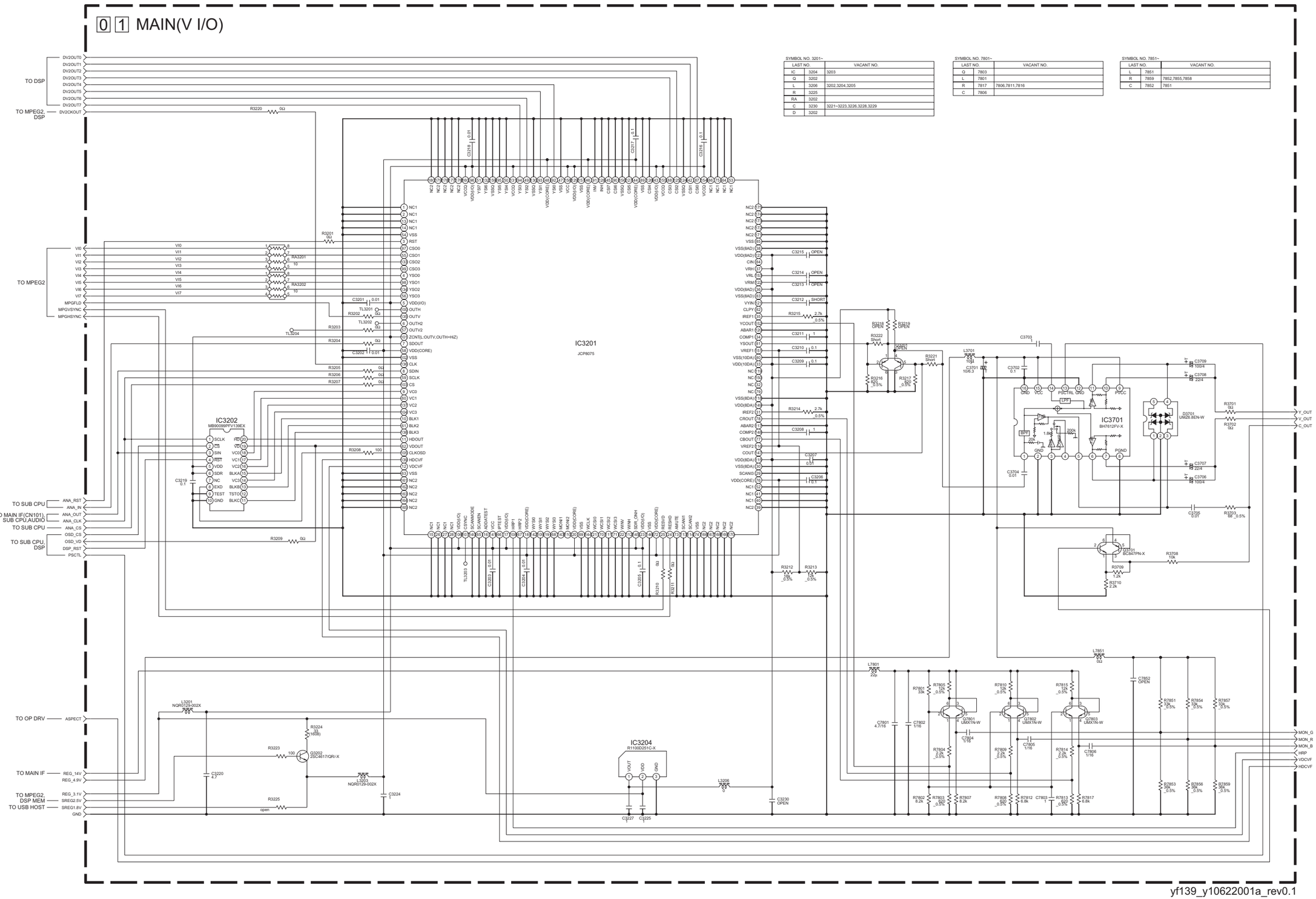


LAST NO.		VACANT NO.
IC	3002	
L	3007	3003,3004
R	3046	3005,3006,3010,3011,3015,3018-3021,3037,3038
RA	3002	
C	3024	

yf139_y10607001a_rev0.1

NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

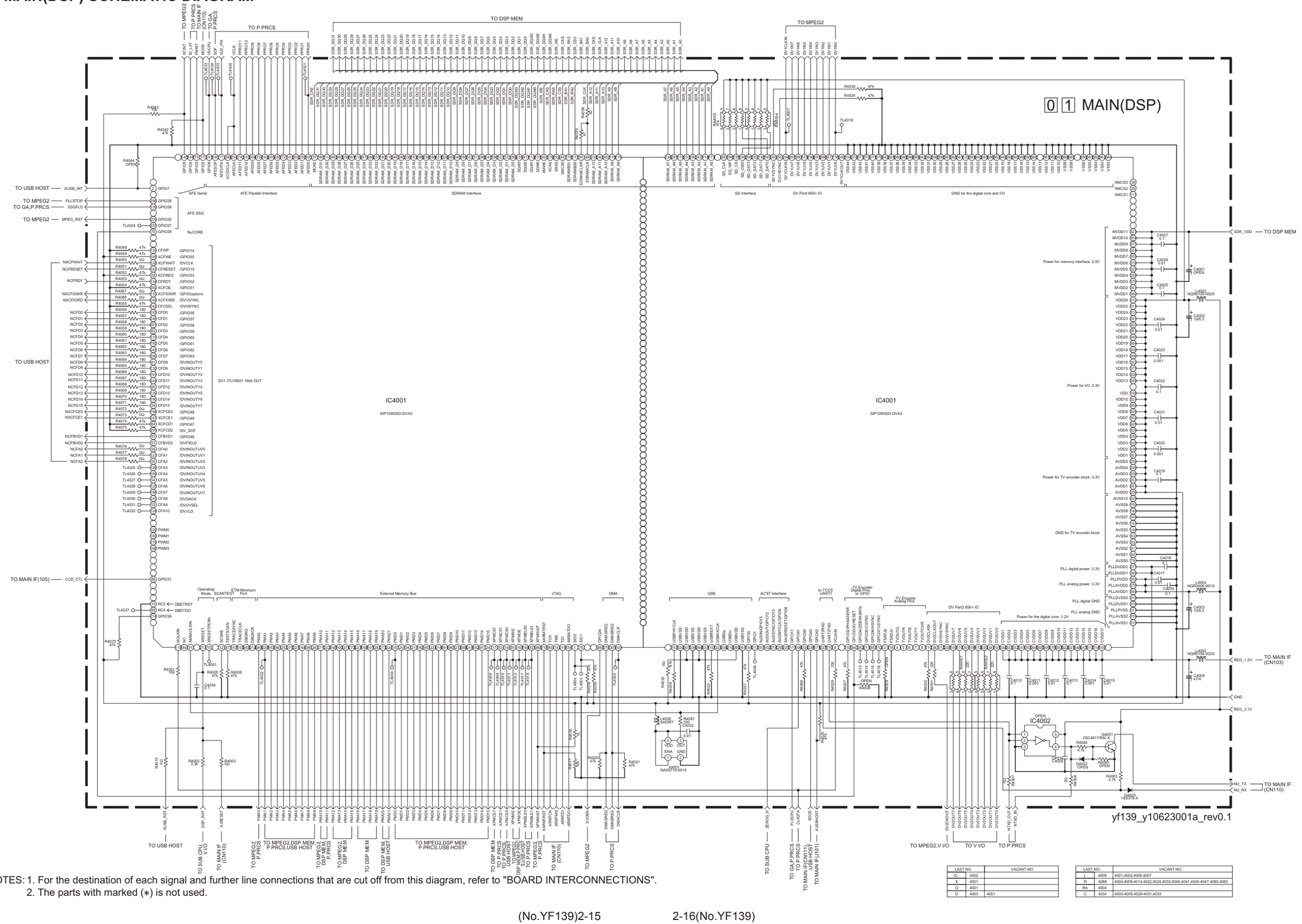
■ MAIN(V I/O) SCHEMATIC DIAGRAM



yf139_y10622001a_rev0.1

NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

■ MAIN(DSP) SCHEMATIC DIAGRAM

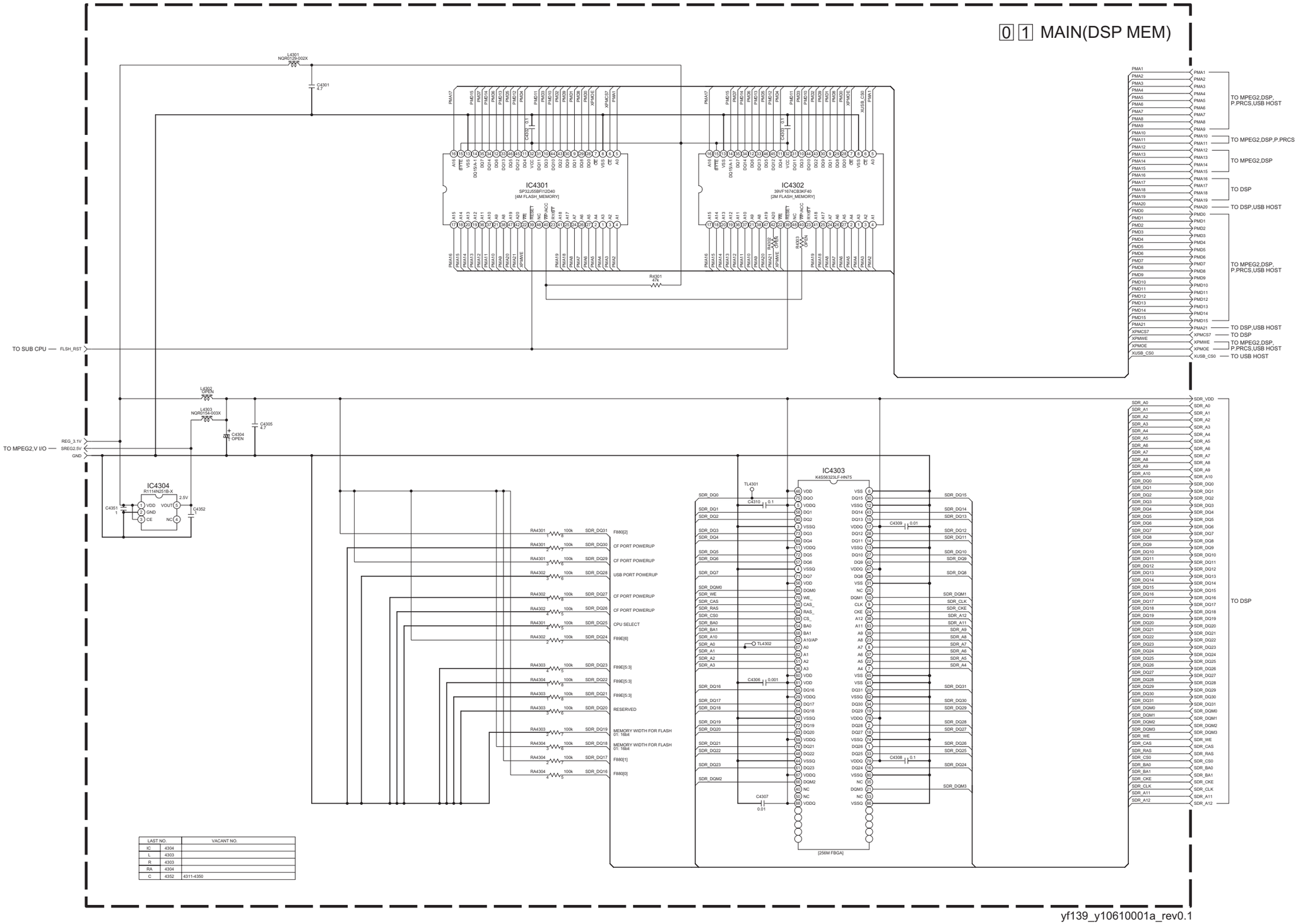


NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

LAST NO.		VACANT NO.
IC	4002	
X	4001	
Q	4001	
D	4003	4001

LAST NO.		VACANT NO.
L	4008	4001,4002,4006,4007
R	4088	4004,4009-4014,4022,4024,4033,4040,4041,4045-4047,4080,4082
RA	4004	
C	4034	4005-4009,4029-4031,4033

■ MAIN(DSP MEM) SCHEMATIC DIAGRAM

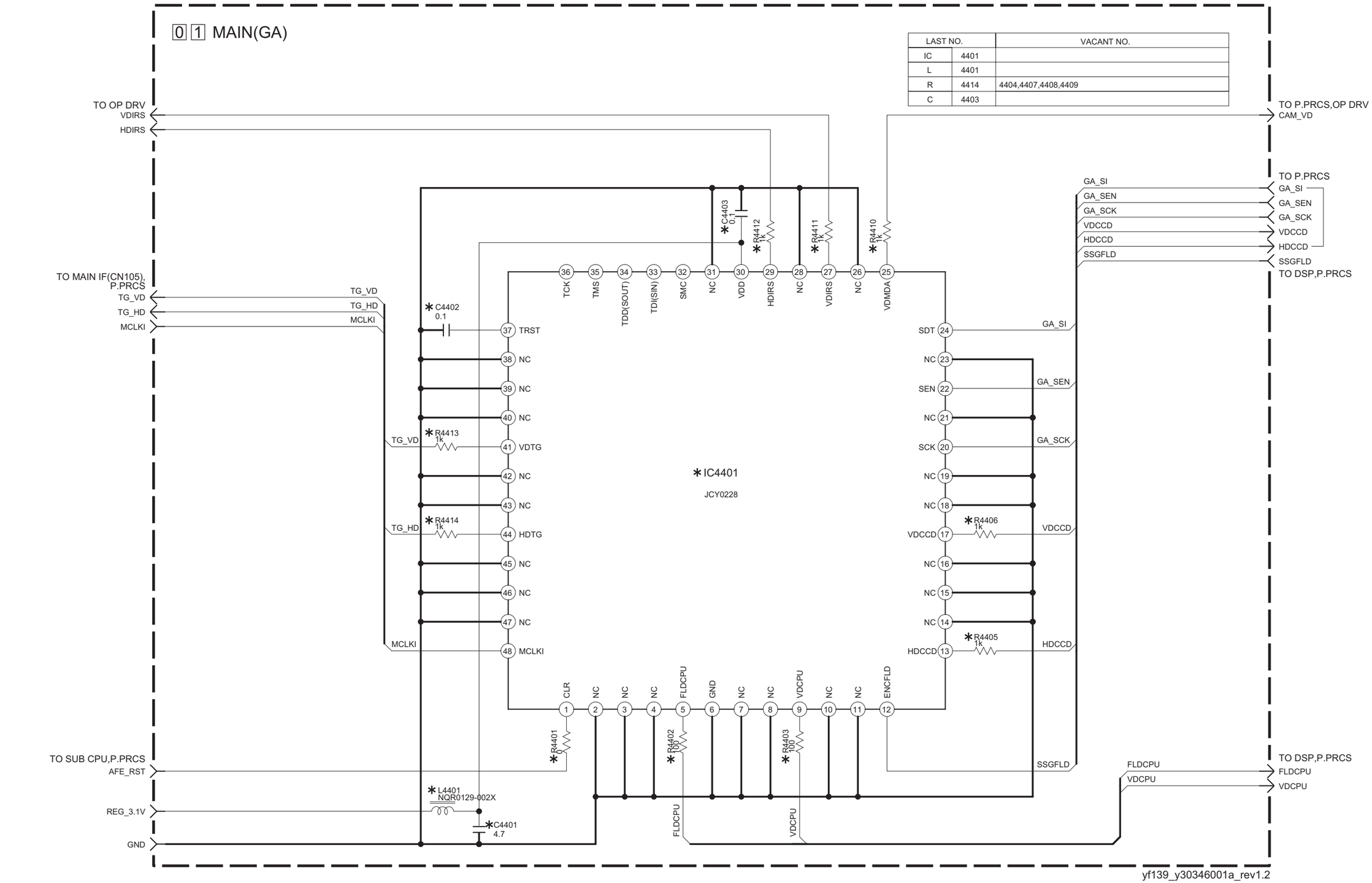


LAST NO.		VACANT NO.
IC	4304	
L	4303	
R	4303	
RA	4304	
C	4352	4311-4350

yf139_y10610001a_rev0.1

NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

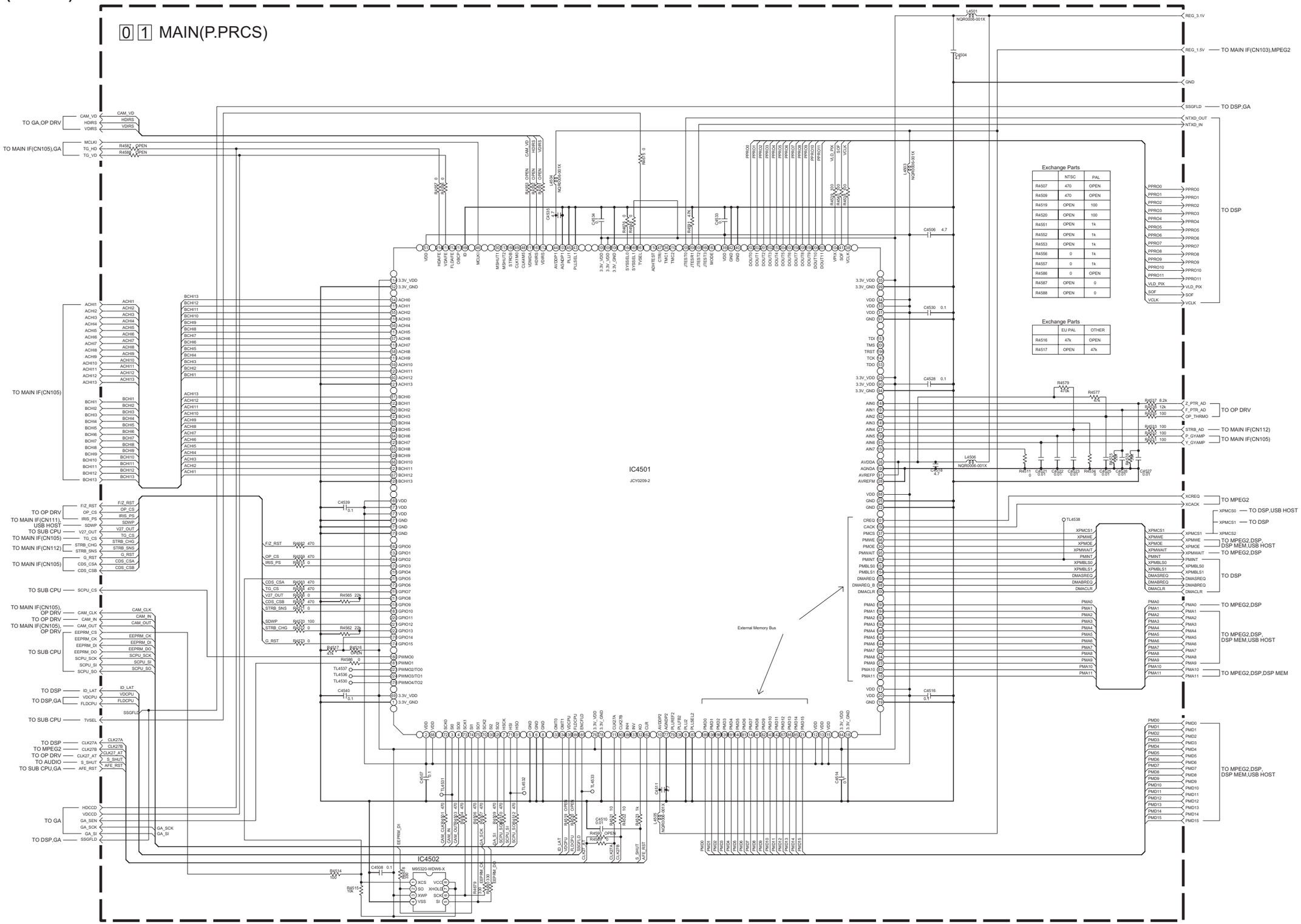
■ MAIN(GA) SCHEMATIC DIAGRAM



NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

■ MAIN(P.PRCS) SCHEMATIC DIAGRAM

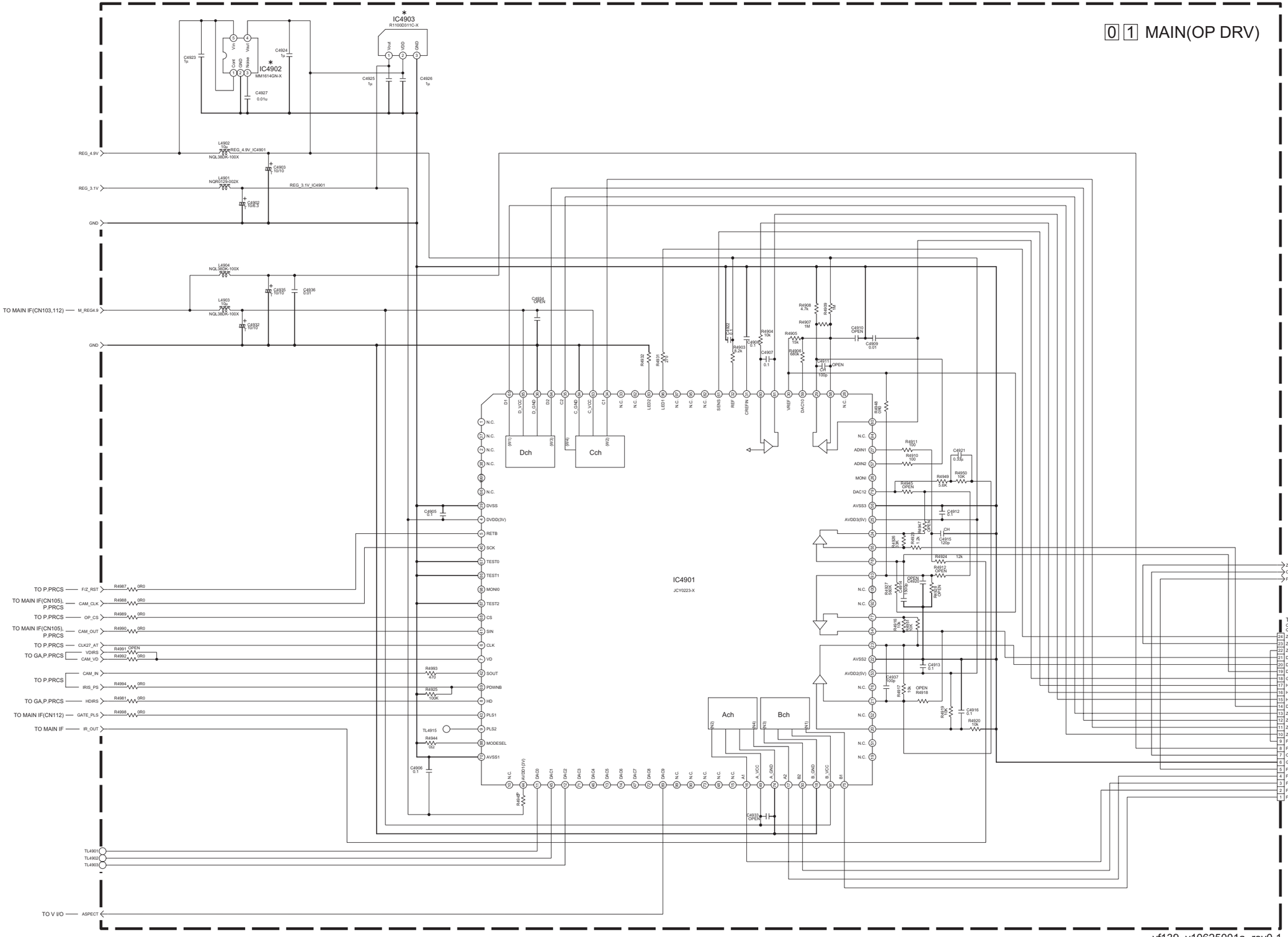
0 1 MAIN(P.PRCS)



NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

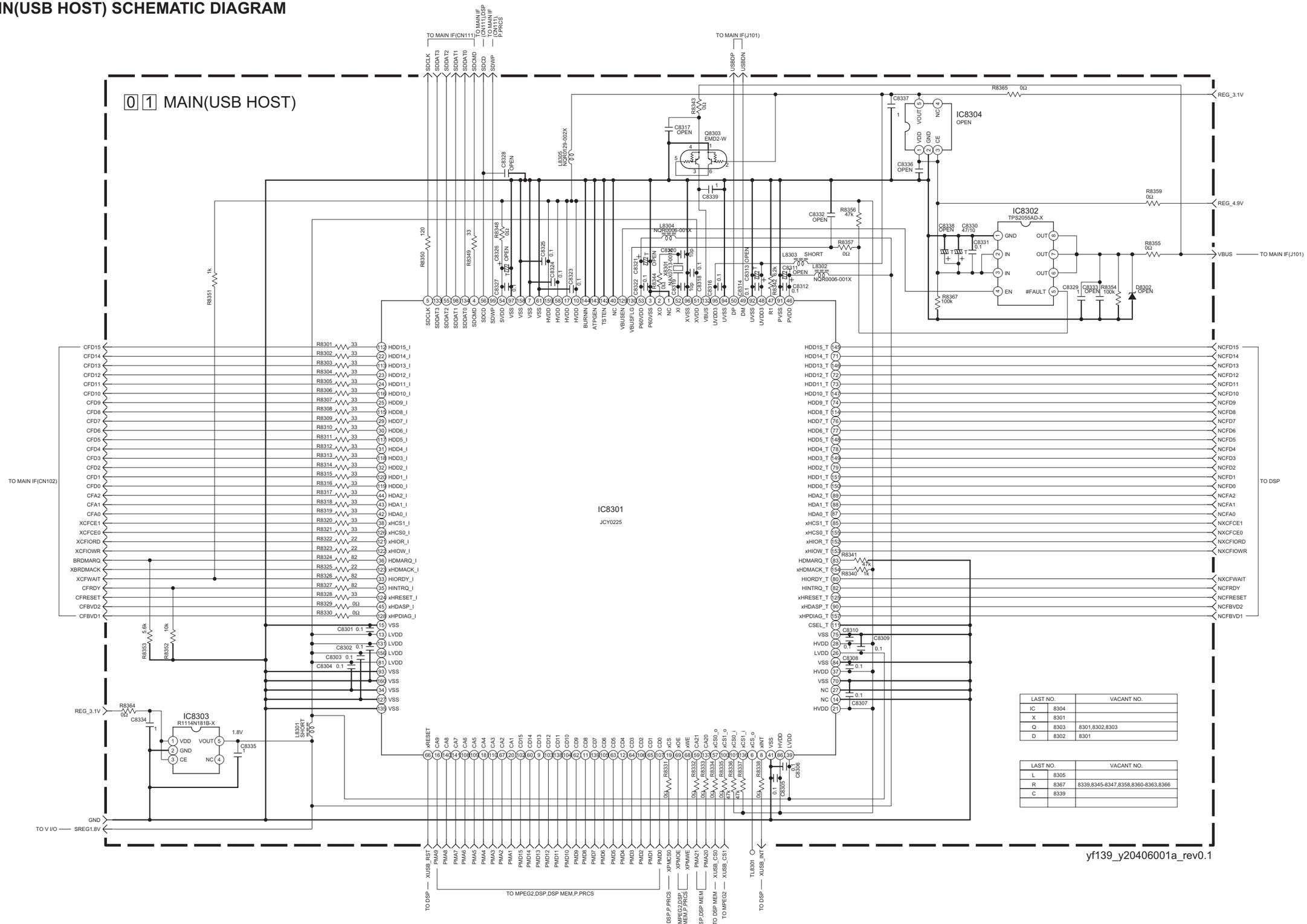
yf139_y10624001a_rev0.1

■ MAIN(OP DRV) SCHEMATIC DIAGRAM



NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

■ MAIN(USB HOST) SCHEMATIC DIAGRAM

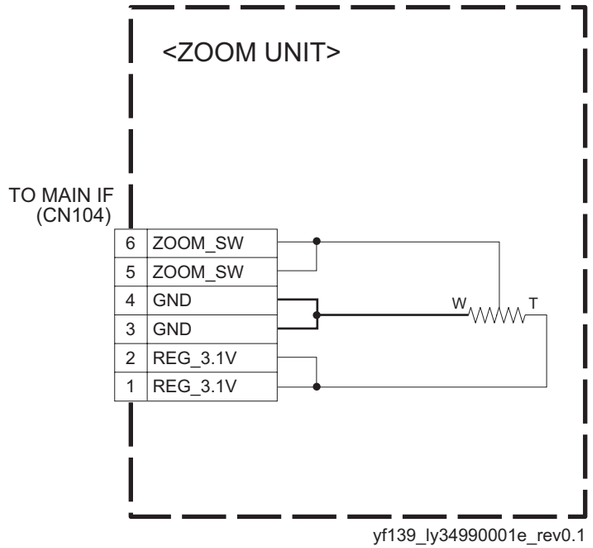


LAST NO.		VACANT NO.
IC	8304	
X	8301	
Q	8303	8301,8302,8303
D	8302	8301

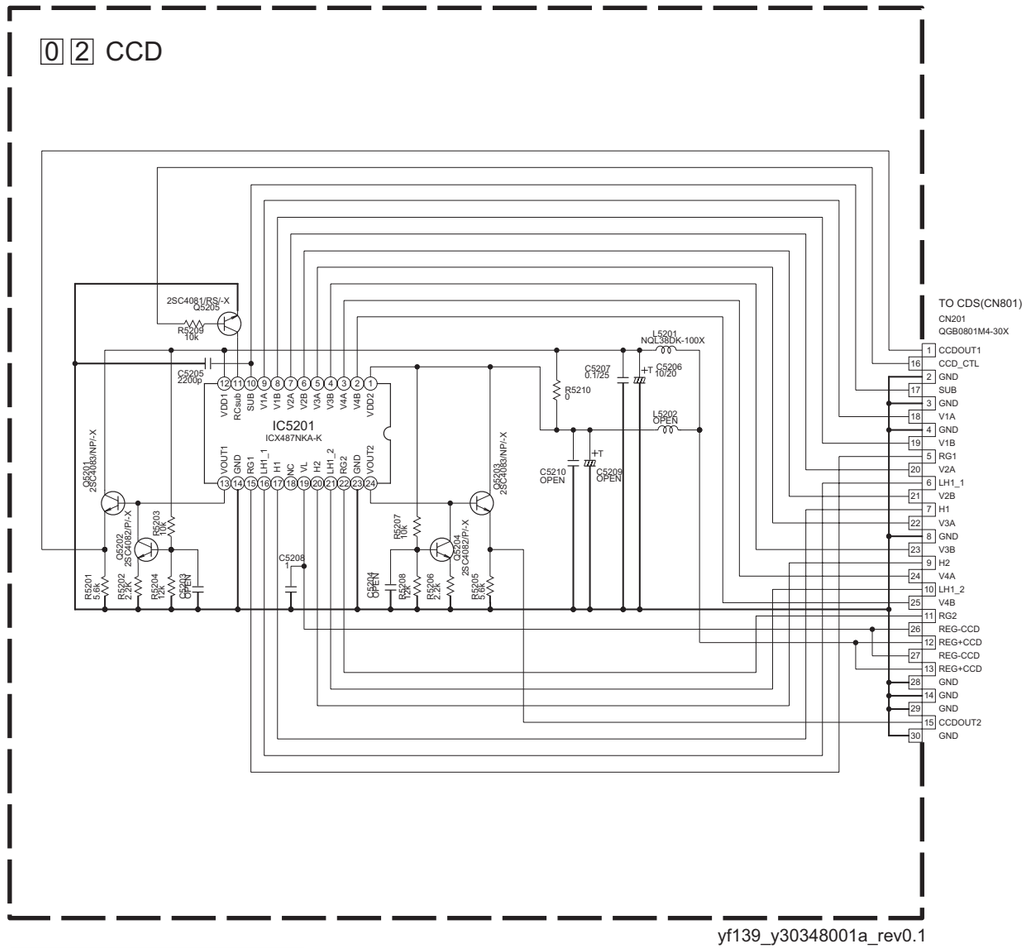
LAST NO.		VACANT NO.
L	8305	
R	8367	8339,8345-8347,8358,8360-8363,8366
C	8339	

NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

■ ZOOM UNIT



■ CCD SCHEMATIC DIAGRAM

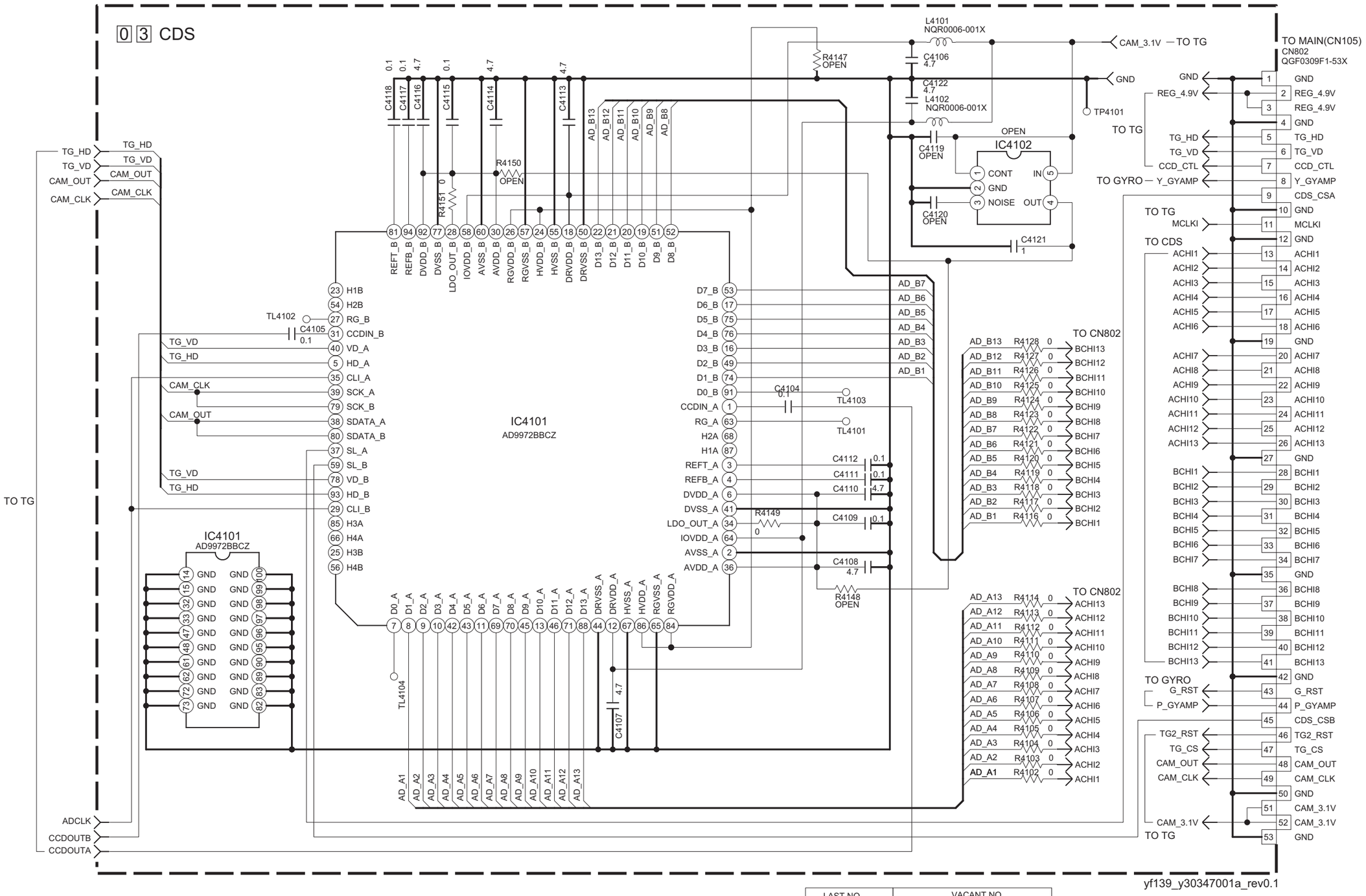


LAST NO.		VACANT NO.
IC	5201	
Q	5205	
L	5202	
R	5210	
C	5210	5201,5202

NOTE: The schematic diagram is only for reference. Avoid replacing individual parts.
Replace the entire unit only.

NOTES :1. For the destination of each signal and further line connectionsthat are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.
3. IC5201 is incorporated in the CCD base assembly .
When IC5201 needs replacement, replace the CCD base assembly in whole because it cannot be replaced alone.

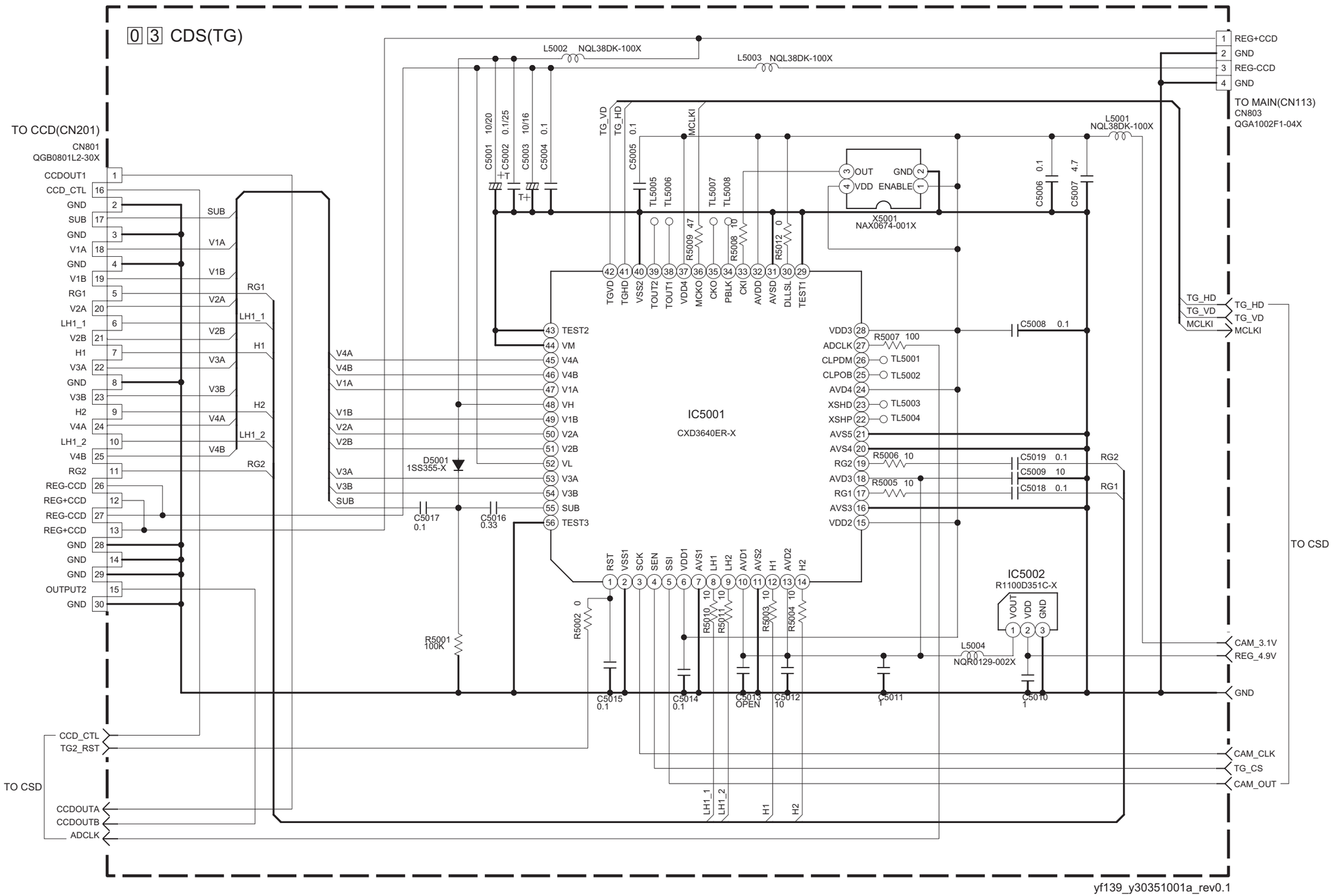
■ CDS SCHEMATIC DIAGRAM



LAST NO.		VACANT NO.
IC	4102	
L	4102	
R	4151	4101,4115,4129~4146
C	4122	4101,4102,4103

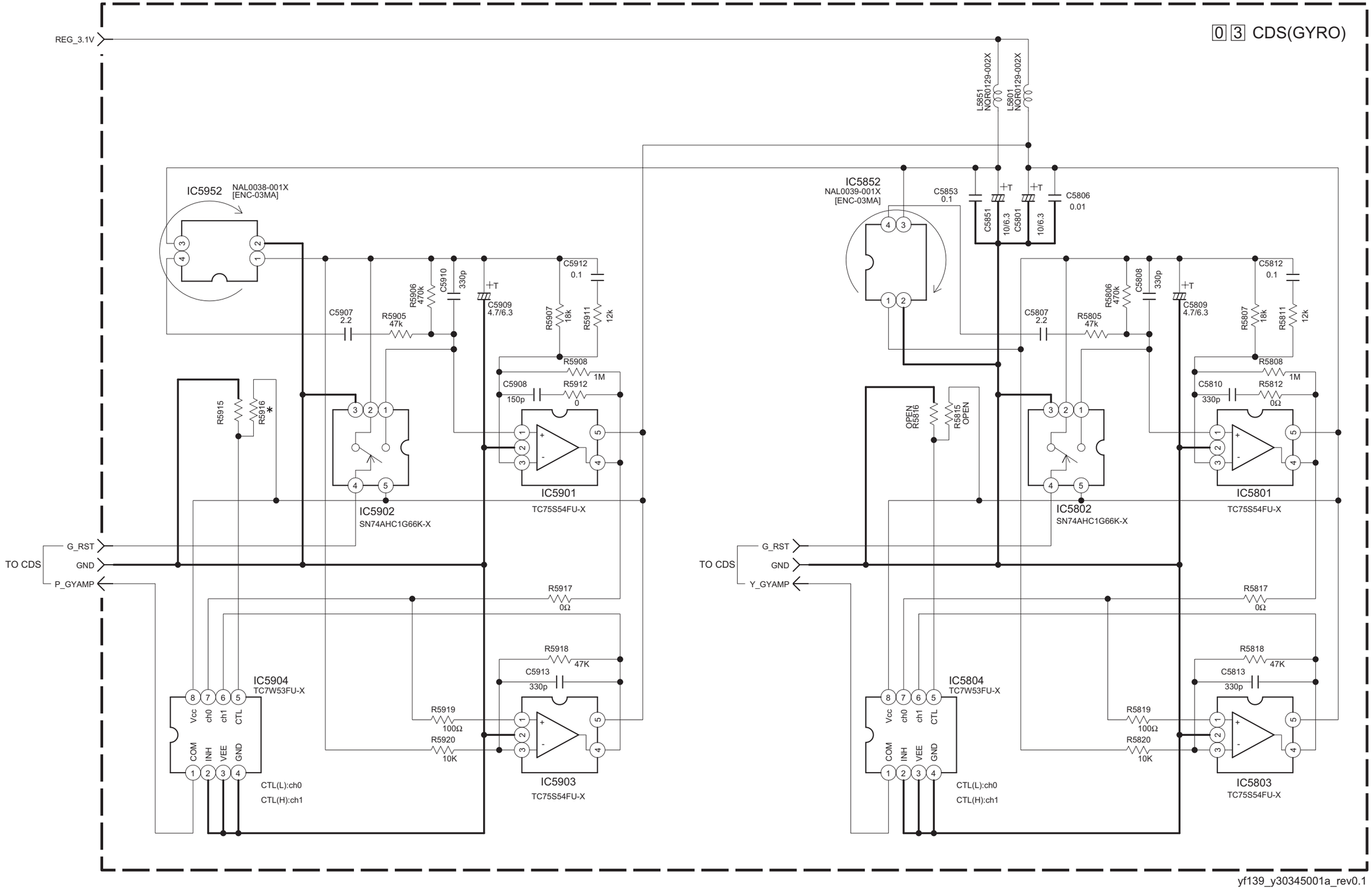
NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

■ CDS(TG) SCHEMATIC DIAGRAM



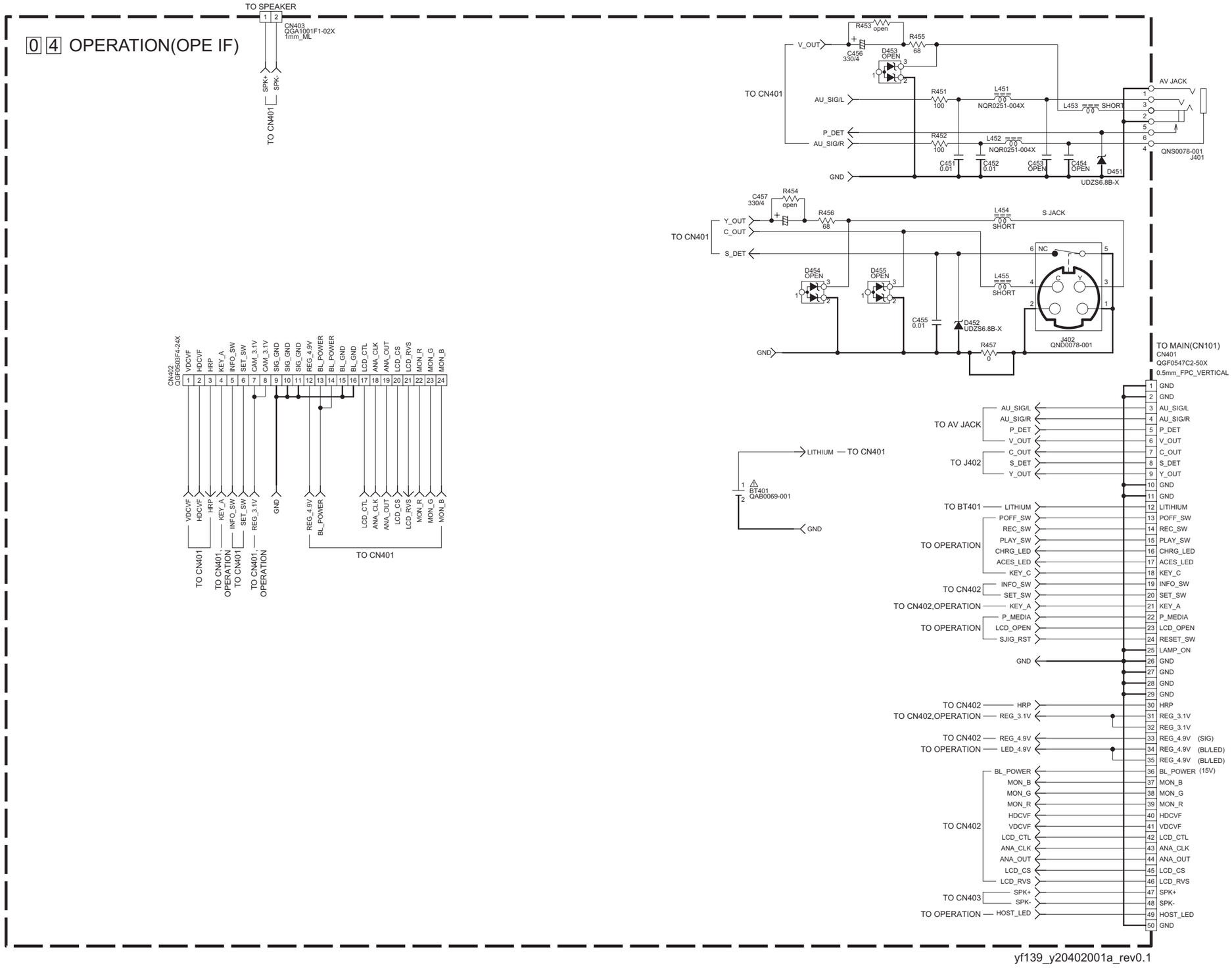
NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

■ CDS(GYRO) SCHEMATIC DIAGRAM



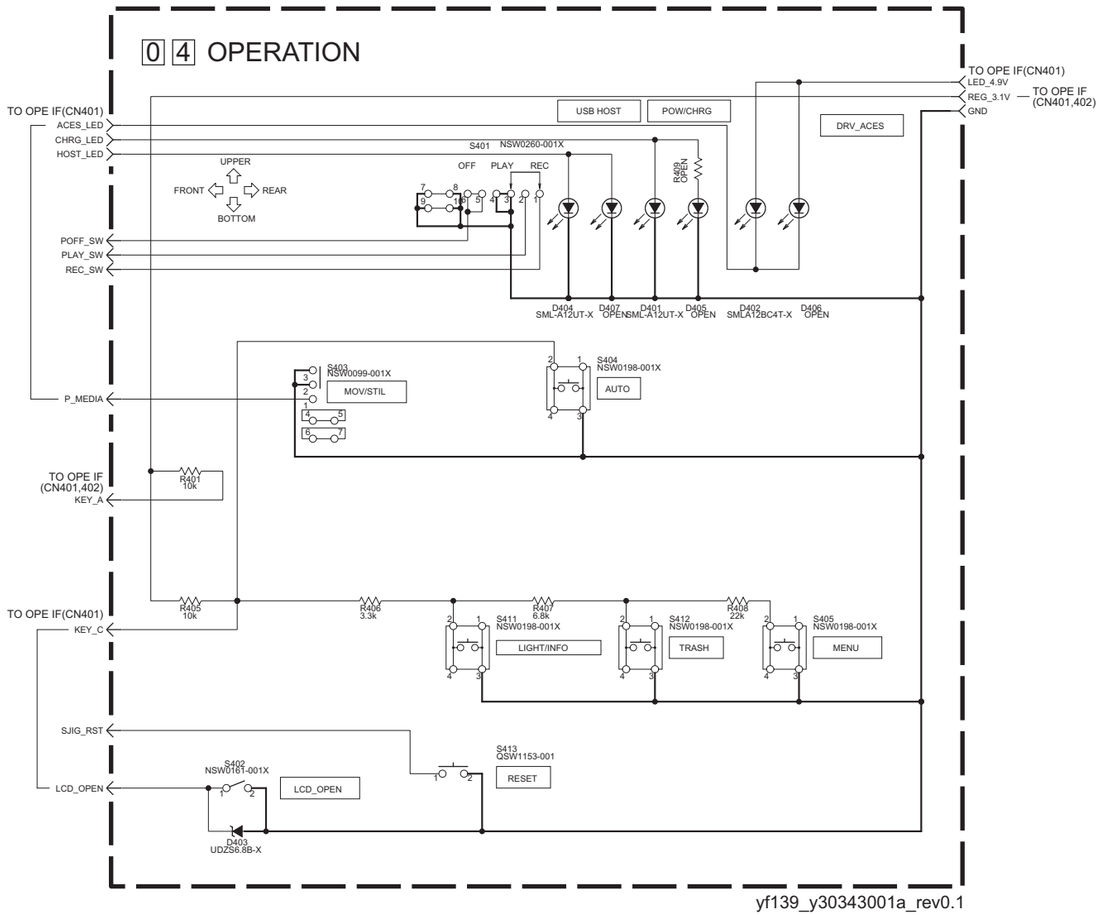
NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

■ OPERATION(OPE IF) SCHEMATIC DIAGRAM



NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

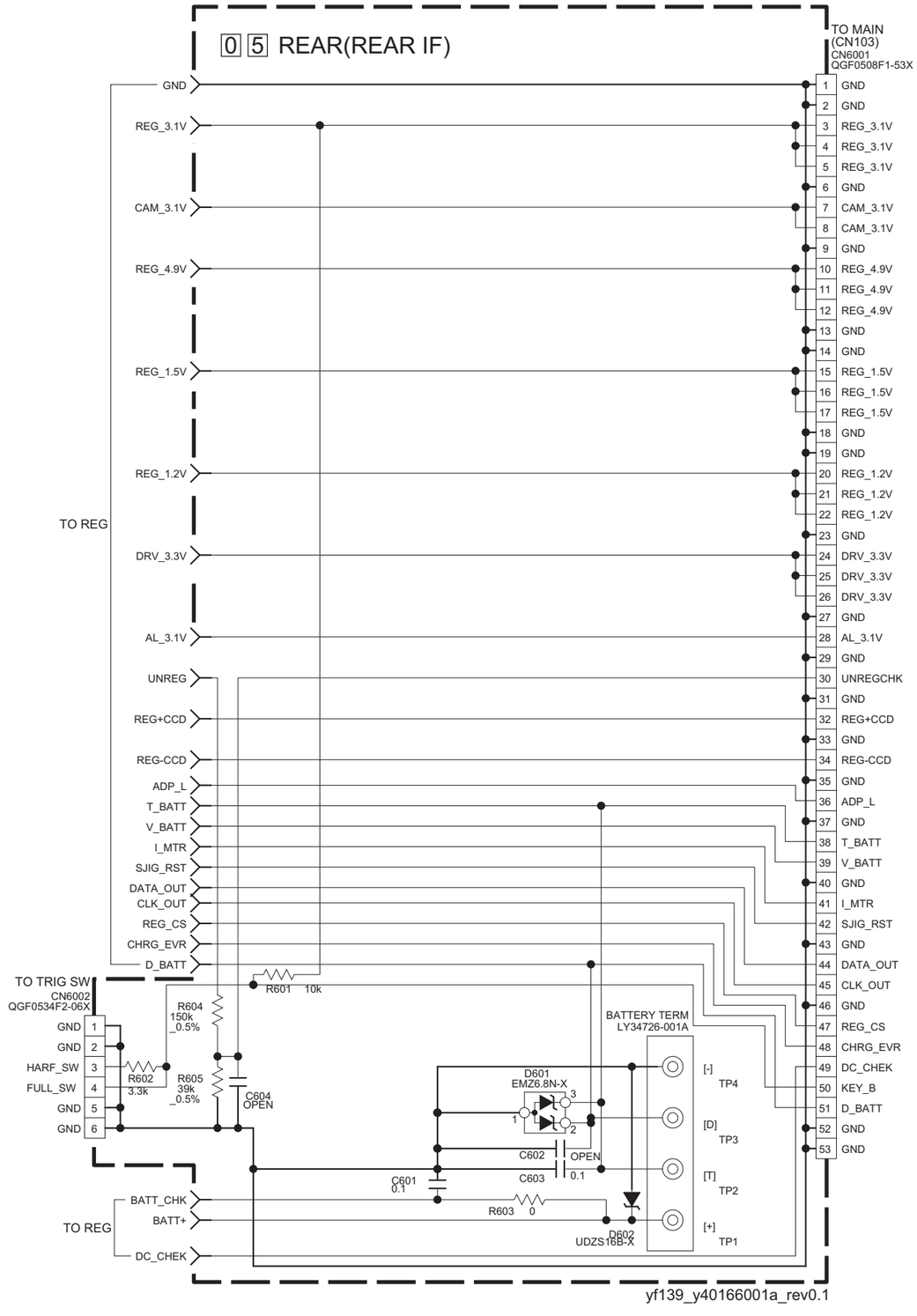
■ OPERATION SCHEMATIC DIAGRAM



yf139_y30343001a_rev0.1

NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

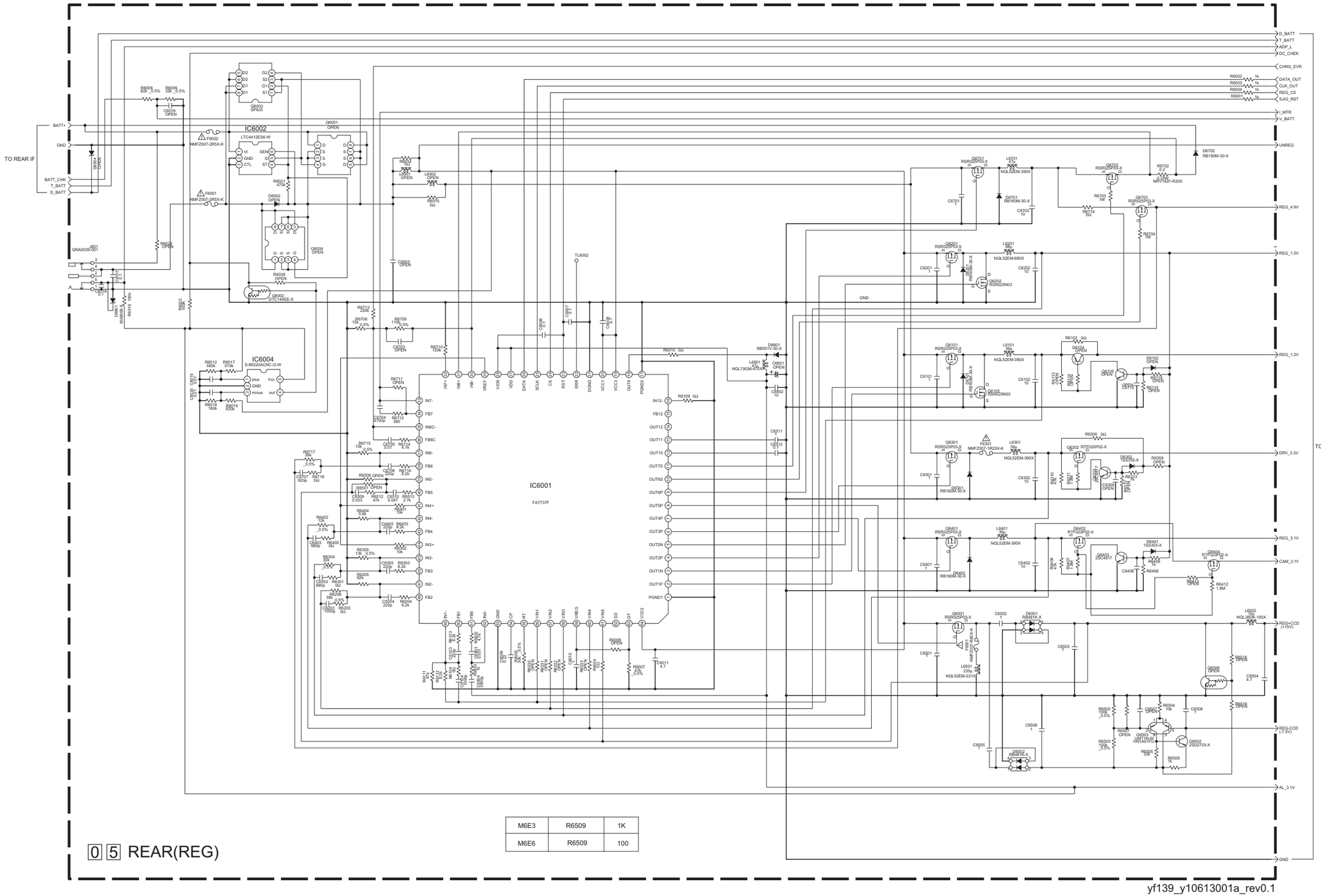
■ REAR(REAR IF) SCHEMATIC DIAGRAM



yf139_y40166001a_rev0.1

NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

■ REAR(REG) SCHEMATIC DIAGRAM



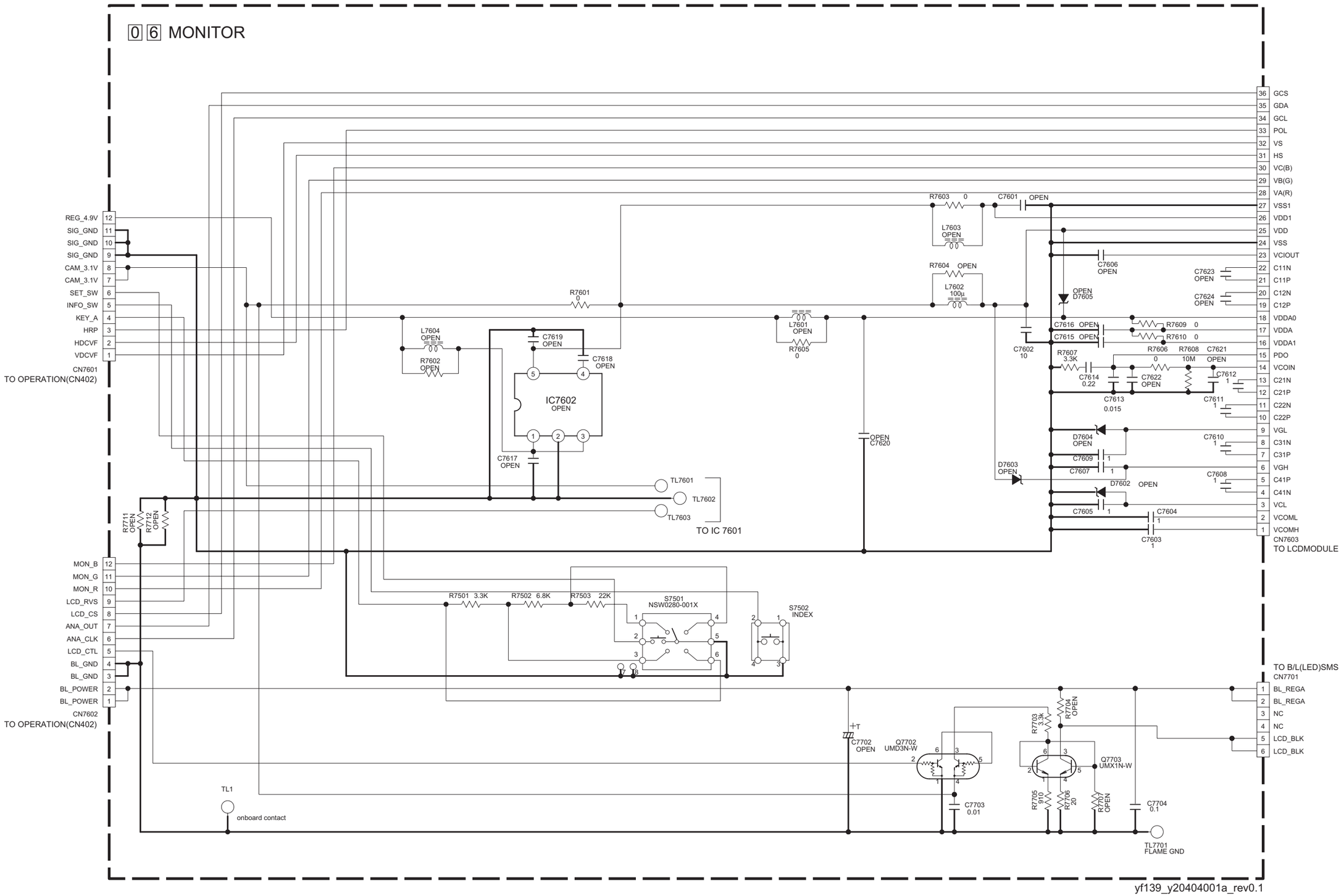
M6E3	R6509	1K
M6E6	R6509	100

0 5 REAR(REG)

yf139_y10613001a_rev0.1

NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

■ MONITOR SCHEMATIC DIAGRAM



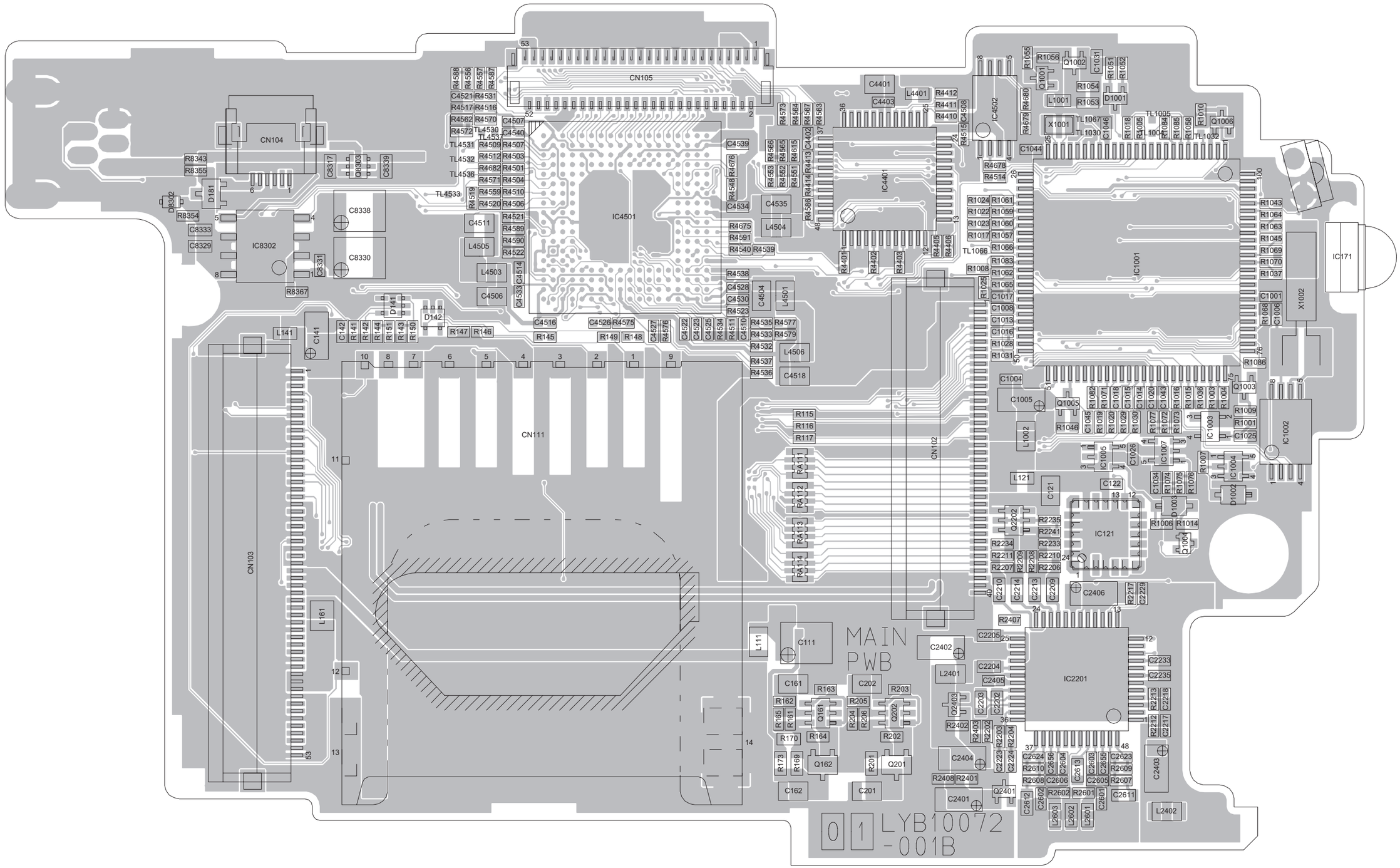
NOTES: 1. For the destination of each signal and further line connections that are cut off from this diagram, refer to "BOARD INTERCONNECTIONS".
2. The parts with marked (∗) is not used.

■ MAIN CIRCUIT BOARD

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

<01>MAIN
LYB10072-001B

FOIL SIDE(B)

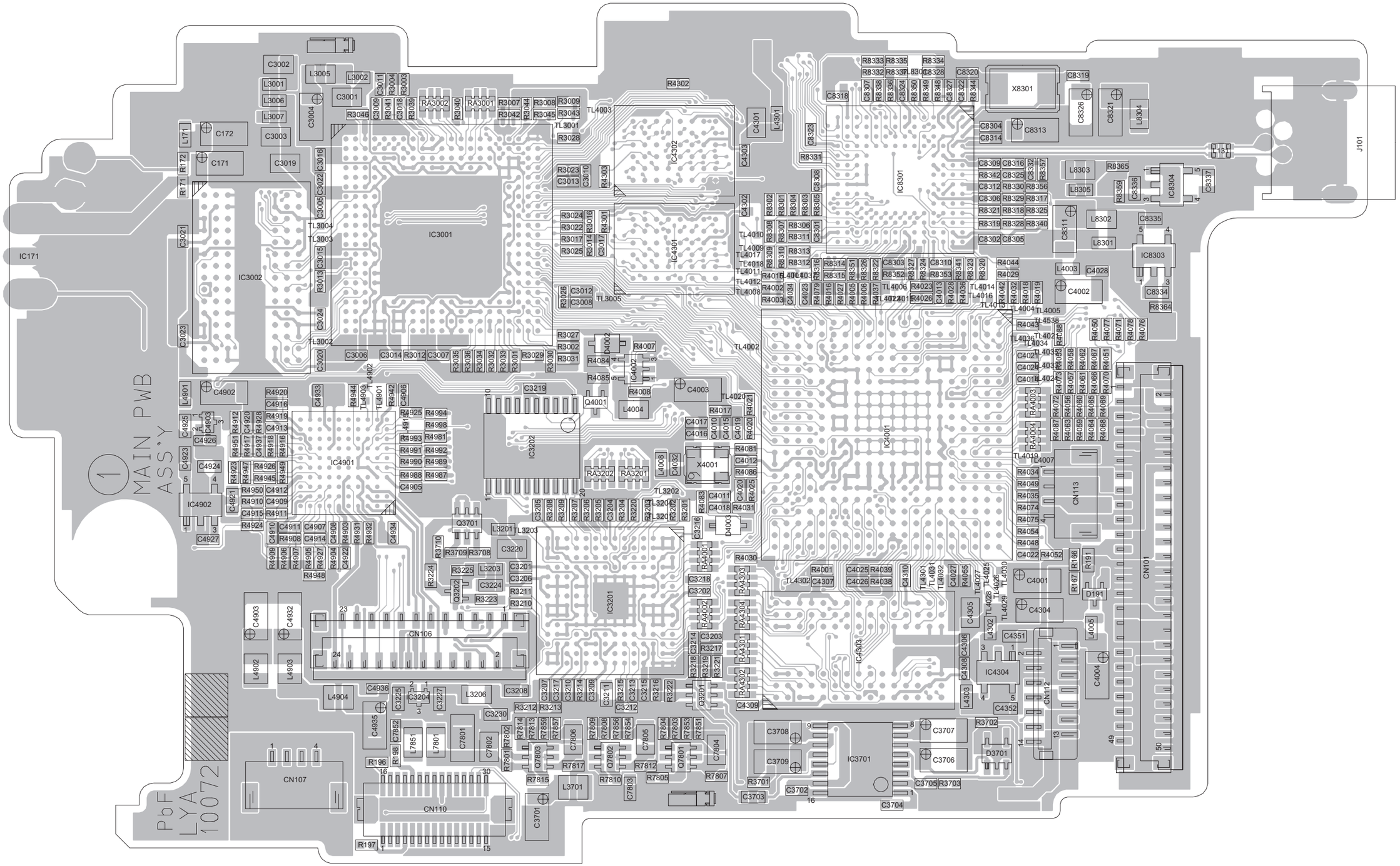


■ MAIN CIRCUIT BOARD

Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

<01>MAIN
LYB10072-001B

COMPONENT SIDE(A)

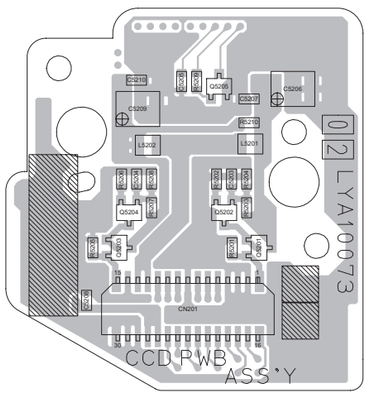


■ CCD, OPE AND MONITOR CIRCUIT BOARDS

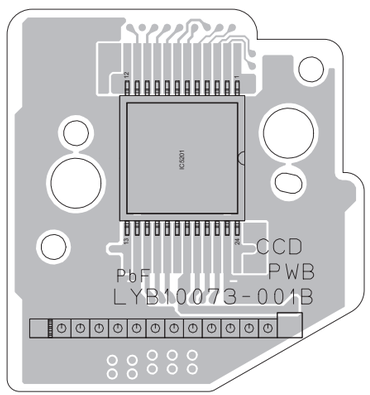
Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

<02>CCD
LYB10073-001B

FOIL SIDE(B)

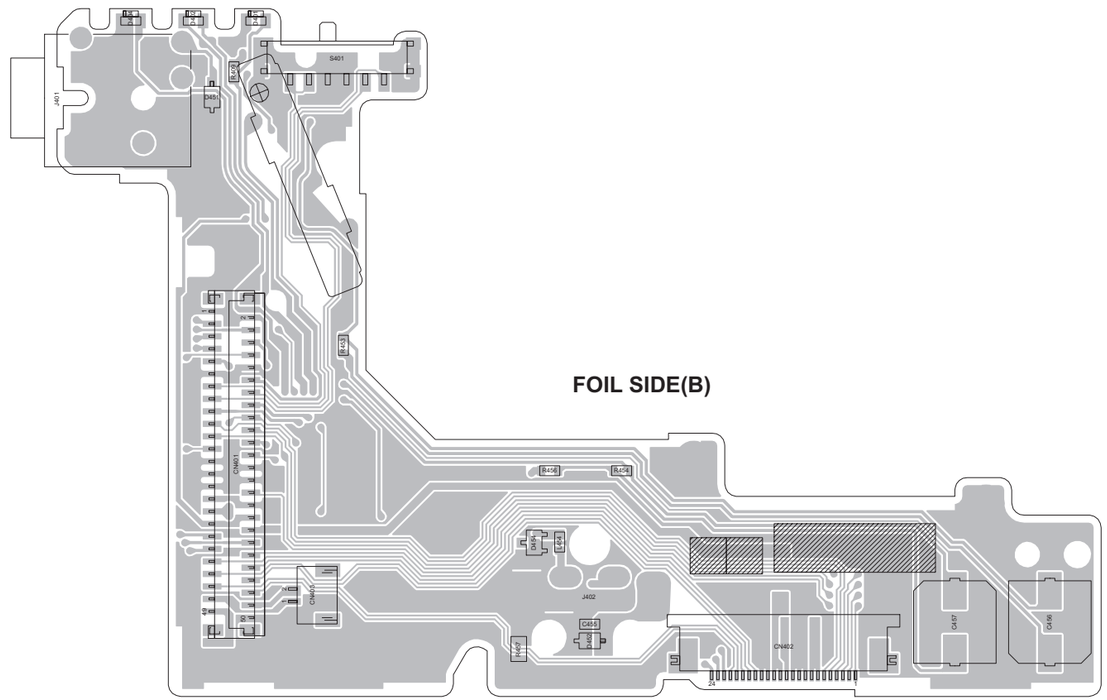


COMPONENT SIDE(A)



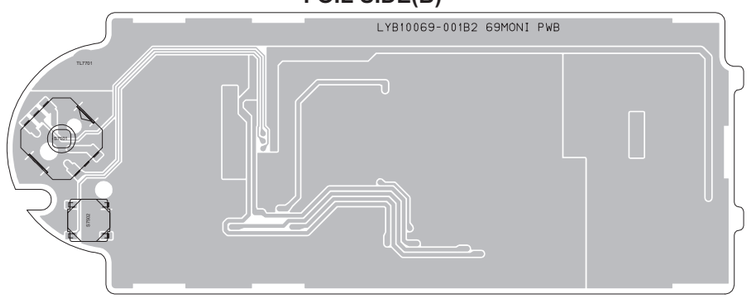
<04>OPE
LYB10069-001B

FOIL SIDE(B)

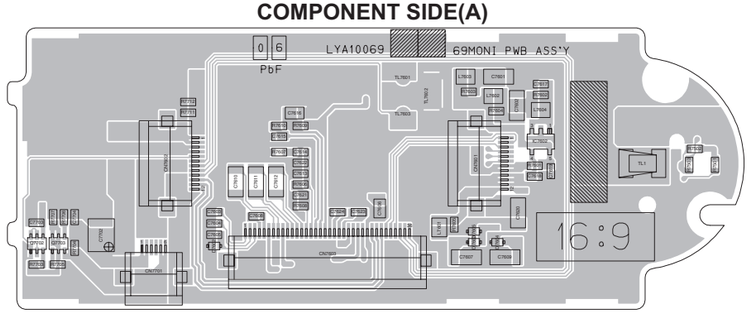


<06>MONITOR
LYB10069-001B

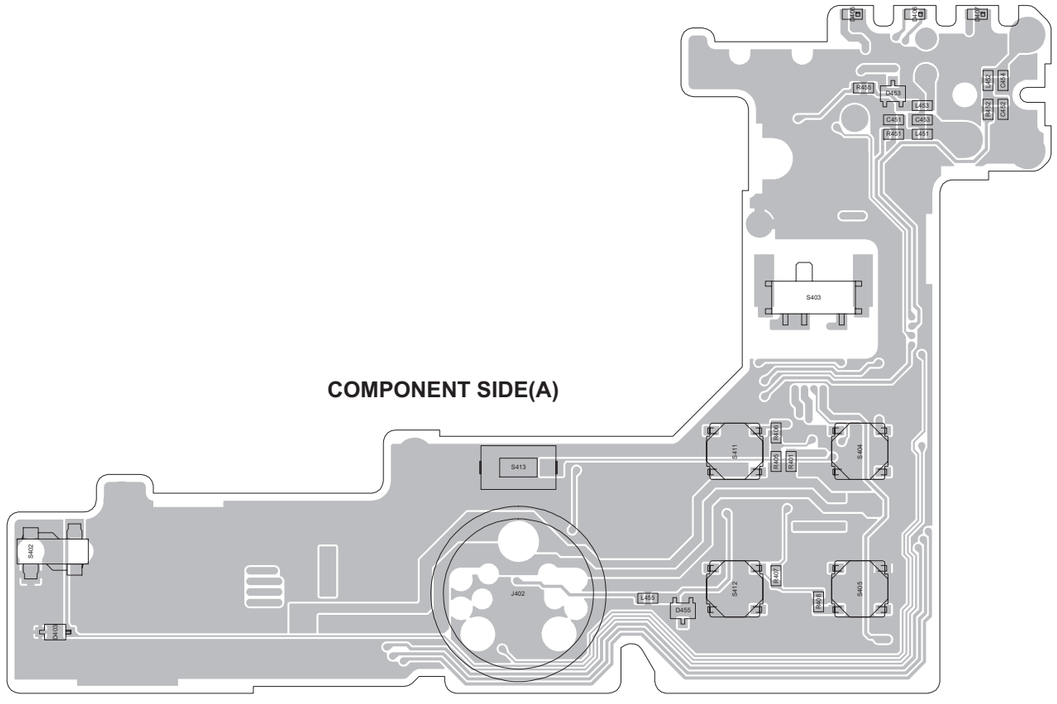
FOIL SIDE(B)



COMPONENT SIDE(A)



COMPONENT SIDE(A)



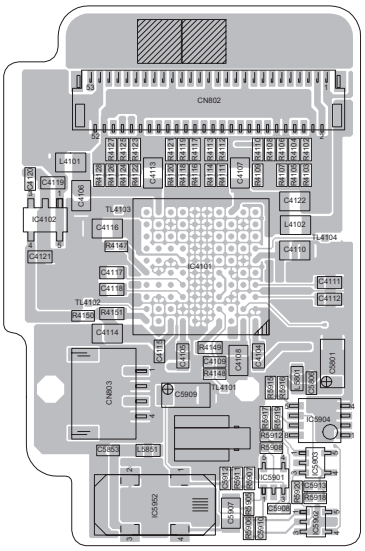
■ CDS AND REAR CIRCUIT BOARDS

CAUTION :
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE AND RATED FUSE(S).
ATTENTION :
POUR UNE PROTECTION PERMANENTE CONTRE LES RISQUE D'INCENDE,
REMPLACER LES FUSIBLES PAR UNAAUTRE DE MEME TYPE ET DE MEME TENSION.

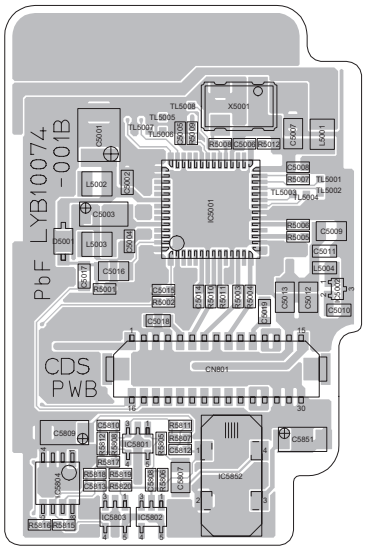
Lead free solder used in the board (material : Sn-Ag-Cu, melting point : 219 Centigrade)

<03>CDS
LYB10074-001B

FOIL SIDE(B)

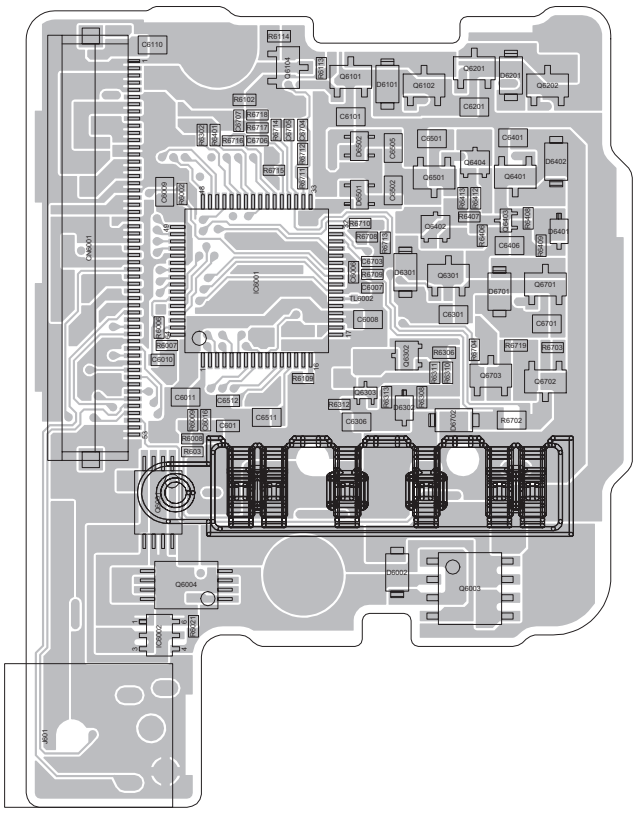


COMPONENT SIDE(A)

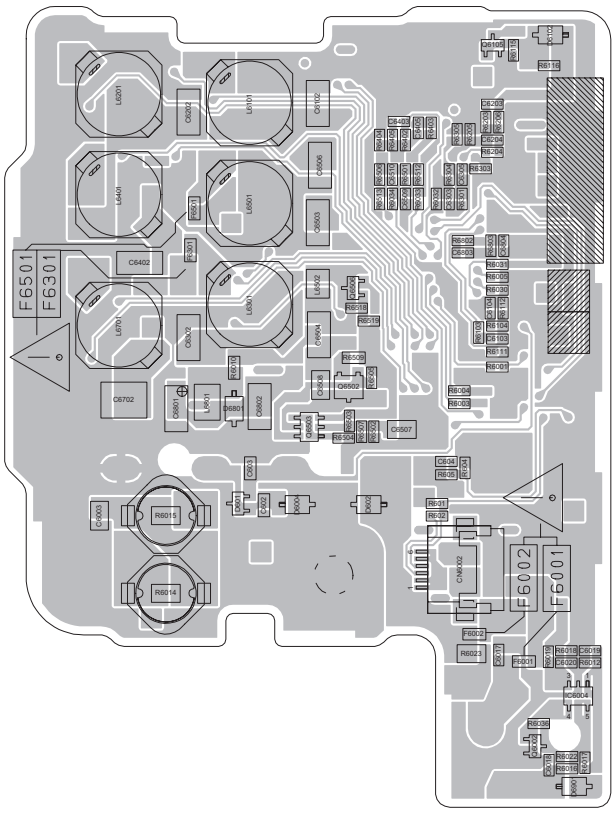


<05>REAR
LYB10068-001B

FOIL SIDE(B)



COMPONENT SIDE(A)



■ VOLTAGE CHARTS

<MAIN>

MODE PIN NO.	REC	PLAY
IC121		
1	0	0
2	1.7	1.7
3	0	0
4	1.9	1.9
5	1.5	1.5
6	0	0
7	1.5	1.5
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	3.0	3.0
14	0	0
15	0	3.0
16	1.5	1.5
17	3.0	3.1
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
IC171	-	-
IC1001		
1	3.0	3.0
2	3.0	3.0
3	0	3.0
4	0	0
5	0	0
6	0	0
7	3.0	3.0
8	0	0
9	3.0	2.9
10	3.1	3.0
11	0.1	0
12	3.1	3.0
13	3.1	3.1
14	0	0
15	3.1	3.1
16	3.0	3.0
17	3.0	3.0
18	0	0
19	0	0
20	0	0
21	2.9	3.0
22	3.0	3.0
23	1.4	1.4
24	1.4	1.4
25	3.0	3.0
26	0	0
27	3.0	3.0
28	0	0
29	3.0	3.0
30	3.0	0
31	3.0	0
32	0	3.0
33	3.0	3.0
34	3.0	3.0
35	3.0	3.0
36	0	0
37	0	0
38	3.0	3.0
39	3.0	3.0
40	3.0	3.0
41	3.0	3.0
42	0	0
43	0	0
44	2.9	2.9
45	0	0
46	3.0	3.1
47	1.6	1.5
48	0	0
49	0	0
50	3.0	3.1
51	1.2	1.3
52	0	3.0
53	0	0
54	3.0	3.0
55	3.0	3.0
56	3.0	3.0
57	3.0	3.1
58	3.1	3.1
59	3.1	3.1
60	2.9	2.8
61	0	0
62	2.3	2.2
63	3.1	3.1
64	3.1	3.1
65	0	0
66	3.0	3.0
67	3.0	3.0
68	3.0	3.0
69	3.0	3.0
70	3.0	2.9

MODE PIN NO.	REC	PLAY
71	1.2	1.1
72	3.0	3.0
73	0	3.0
74	3.0	3.0
75	3.0	3.0
76	3.0	3.0
77	0	0
78	2.8	3.0
79	2.6	2.6
80	0	0
81	0	0
82	3.0	3.0
83	3.0	3.0
84	0	0
85	0	0
86	0	0
87	0	0
88	3.1	3.1
89	3.0	3.1
90	3.0	3.1
91	3.0	3.0
92	0	0
93	0	0
94	0	0
95	0	0
96	0	0
97	3.1	3.1
98	0	0
99	3.1	3.0
100	0	0
IC1002		
1	0	0
2	3.0	0
3	3.0	0
4	0	0
5	0	0
6	0.5	0.5
7	0.4	0.4
8	3.0	3.0
IC1003		
1	3.0	3.0
2	3.1	3.0
3	0	0
4	0	0
IC1004		
1	3.0	3.0
2	0	0.1
3	0.1	0
4	3.0	3.1
5	3.0	3.0
IC1005		
1	3.0	3.0
2	3.0	2.9
3	0	0
4	0	0
5	3.0	3.0
IC1007		
1	0	1.4
2	0	0
3	1.2	1.1
4	0	0
5	3.0	3.1
IC2201		
1	0	1.6
2	0	0
3	0	1.5
4	3.1	3.0
5	3.1	3.1
6	0	0
7	1.3	1.5
8	1.4	1.4
9	1.5	0
10	0	2.5
11	0	2.9
12	2.7	2.7
13	0	1.5
14	1.5	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	3.1
20	0	0
21	0.2	0
22	1.5	1.5
23	0.3	0.3
24	1.5	1.5
25	0	0
26	0	0
27	4.8	4.9
28	0	0
29	2.4	2.4
30	0	0
31	3.1	3.1
32	1.5	1.5
33	0	1.5
34	0	1.5

MODE PIN NO.	REC	PLAY
35	0	1.5
36	1.5	1.5
37	0.1	0.1
38	1.5	1.5
39	0	0
40	0	0
41	0	0
42	4.2	4.5
43	2.8	0
44	0	4.5
45	1.5	0
46	1.5	0
47	1.5	1.5
48	1.5	1.5
IC3001	-	-
IC3002	-	-
IC3201	-	-
IC3202	-	-
IC3204	-	-
IC3701	-	-
IC4001	-	-
IC4301	-	-
IC4302	-	-
IC4303	-	-
IC4304	-	-
IC4401		
1	3.0	3.0
2	0	0
3	0	0
4	0	0
5	1.5	1.5
6	0	0
7	0	0
8	0	0
9	3.0	3.0
10	0	0
11	0	0
12	1.5	1.3
13	2.7	2.7
14	0	0
15	0	0
16	0	0
17	3.1	3.1
18	0	0
19	0	0
20	3.1	3.1
21	0	0
22	3.0	3.1
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0.3
30	3.0	3.1
31	0	0
32	0	0
33	3.1	3.1
34	0	0
35	3.1	3.1
36	0	0
37	3.1	3.1
38	0	0
39	0	0
40	0	0
41	3.0	3.1
42	0	0
43	0	0
44	2.7	2.7
45	0	0
46	0	0
47	0	0
48	0	1.2
IC4501	-	-
IC4502		
1	3.1	3.1
2	0	0
3	3.1	0
4	0	0
5	3.0	3.1
6	3.1	3.1
7	3.0	3.1
8	3.1	3.1
IC4901	-	-
IC8301	-	-
IC8302		
1	0	0
2	4.8	4.9
3	4.8	4.8
4	0	0
5	3.0	3.1
6	0	0
7	0	0
8	0	0
IC8303	-	-
Q201		

MODE PIN NO.	REC	PLAY
E	15.0	15.0
C	14.0	14.0
B	14.4	14.4
Q202		
1	13.4	13.4
2	14.0	14.0
3	14.2	14.4
4	13.4	0
5	13.9	13.9
6	15.0	15.0
Q1001		
E	0	0
C	0	0
B	0	0
Q1002		
E	0	0
C	3.1	3.1
B	0.5	0.5
Q1003		
E	3.0	3.0
C	2.9	2.9
B	0	0
Q1004		
E	0	0
C	0	0
B	0	0
Q1005		
S	0	0
D	3.0	3.0
G	3.0	2.9
Q1006		
E	3.1	3.1
C	0.2	0
B	0	3.0
Q2202		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
Q2401		
E	4.2	4.5
C	4.3	4.9
B	4.8	4.9
Q2403		
E	3.1	3.1
C	0	4.8
B	3.7	3.8
Q3202	-	-
Q3701	-	-
Q4001	-	-
Q7801	-	-
Q7802	-	-
Q7803	-	-
Q8303		
1	0	0
2	0	0
3	0	0
4	0	0
5	3.1	3.1
6	0	0

<CCD>

MODE PIN NO.	REC	PLAY
Q5201	-	-
Q5202	-	-
Q5203	-	-
Q5204	-	-
Q5205	-	-

<CDS>

MODE PIN NO.	REC	PLAY
IC4101	-	-
IC5001	-	-
IC5002	-	-
IC5801	-	-
IC5802	-	-
IC5803	-	-
IC5804	-	-
IC5852	-	-
IC5901	-	-
IC5902	-	-
IC5903	-	-
IC5904	-	-
IC5952	-	-

<REAR>

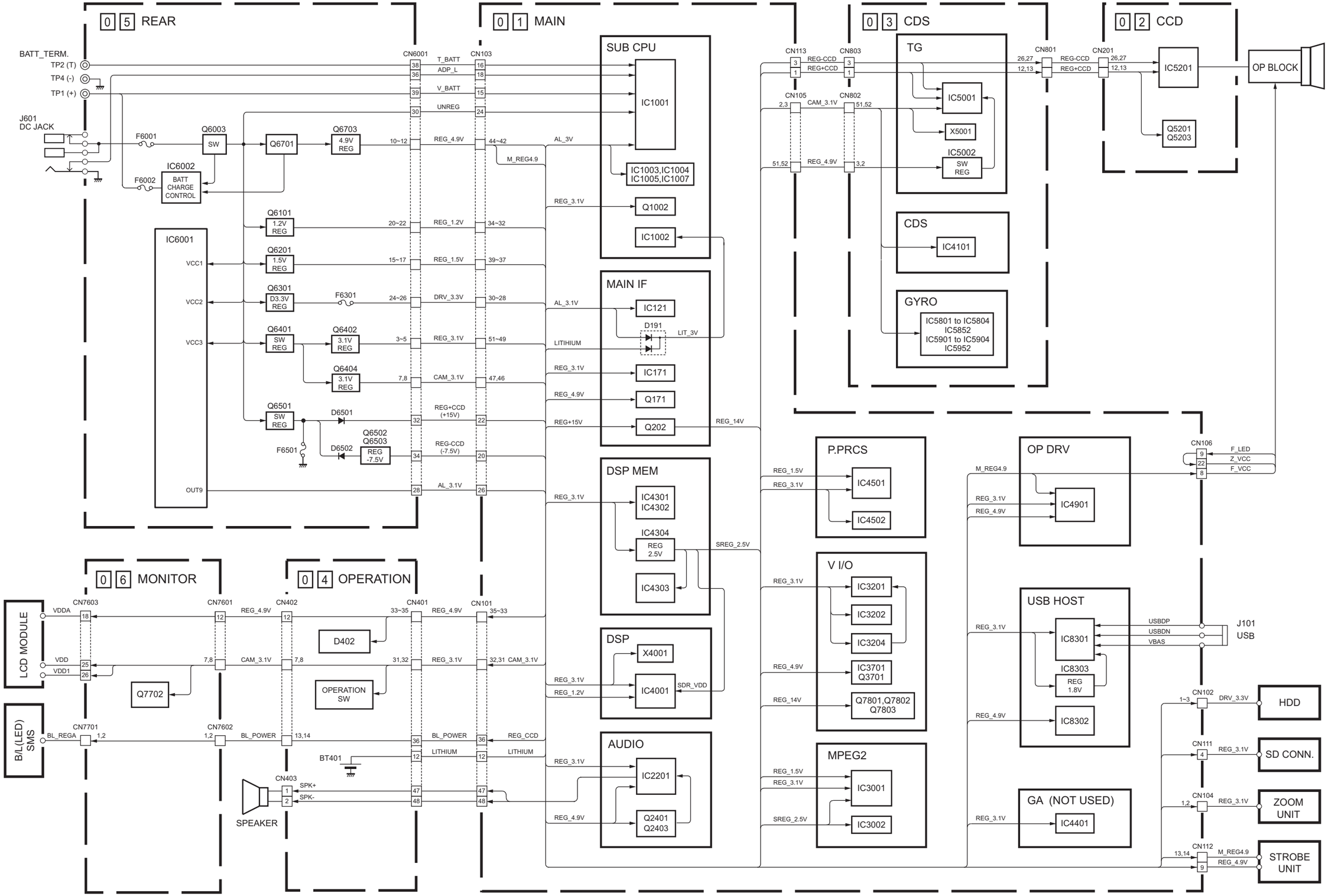
MODE PIN NO.	REC	PLAY
IC6001		
1	0	0
2	0	10.0
3	0	8.9
4	9.7	9.8
5	8.6	8.7
6	7.6	7.8
7	7.8	7.9
8	8.0	8.0
9	8.5	6.3
10	0	0
11	10.7	10.7
12	0	11.8
13	0	8.4
14	0	0
15	0	2.7
16	0	0
17	0	0
18	3.0	3.1
19	11.0	11.0
20	11.0	11.0
21	0	0
22	0	0
23	3.0	2.9
24	3.1	3.0
25	3.0	3.0
26	3.0	3.0
27	3.0	3.1
28	3.1	3.0
29	1.0	1.0
30	0	0
31	0	0
32	0	0
33	0	0
34	2.6	2.7
35	0	0
36	0	0
37	1.0	1.0
38	0.7	0.9
39	1.0	0.9
40	0.7	0.6
41	1.0	1.0
42	1.0	1.0
43	0.7	0.8
44	1.0	1.0
45	1.0	1.0
46	0.8	0.8
47	1.0	1.0
48	0.6	0.5
49	0.9	1.0
50	0.6	0.7
51	0.8	0.8
52	1.0	1.0
53	0	0
54	0	0
55	1.0	1.0
56	0	0
57	0	0
58	0	0
59	2.7	2.7
60	0	0
61	15.0	15.0
62	10.8	10.8
63	1.3	1.3
64	11.0	11.0
IC6002		
1	0	0
2	0	0
3	0	0
4	5.5	5.5
5	10.9	10.9
6	11.0	11.0
IC6004		
1	0	0
2	0	0
3	1.9	2.0
4	0	0
5	0	3.0
Q6003		
1	11.0	11.0
2	5.5	5.4
3	10.9	11.0
4	10.9	10.9
5	0	0
6	0	0
7	11.0	11.0
8	11.0	11.0
Q6101		
S	10.0	10.0
D	11.0	11.0
G	1.1	1.2
Q6102		
S	8.9	9.0
D	0	0
G	1.2	0
Q6201		
S	9.6	9.7

MODE PIN NO.	REC	PLAY
D	11.0	11.0
G	1.5	1.5
Q6202		
S	8.6	8.6
D	0	0
G	1.5	1.4
Q6301		
S	7.6	7.7
D	11.0	11.0
G	3.4	3.3
Q6302		
S	0	0
D	0	3.3
G	3.3	3.2
Q6303		
E	0	0
C	0	0
B	0.7	0.7
Q6401		
S	7.8	7.8
D	11.0	11.0
G	3.2	3.1
Q6402		
S	0	0
D	3.1	0
G	3.1	3.1
Q6403		
E	0	0
C	0	0
B	0.6	0.7
Q6404		
S	0	0
D	3.1	3.1
G	2.7	3.1
Q6501		
S	8.0	0
D	10.9	11.0
G	0	0
Q6502		
E	-14.2	0
C	0	0
B	0	-14.9
Q6503		
1	0	0
2	-7.5	-7.5
3	0	0
4	0	0
5	0	-7.6
6	-13.7	-14.9
Q6701		
S	8.6	0
D	11.0	11.0
G	4.9	4.9
Q6702		
S	9.8	9.8
D	4.7	4.9
G	0	0
Q6703		
S	0	0
D	4.9	4.9
G	4.9	4.9

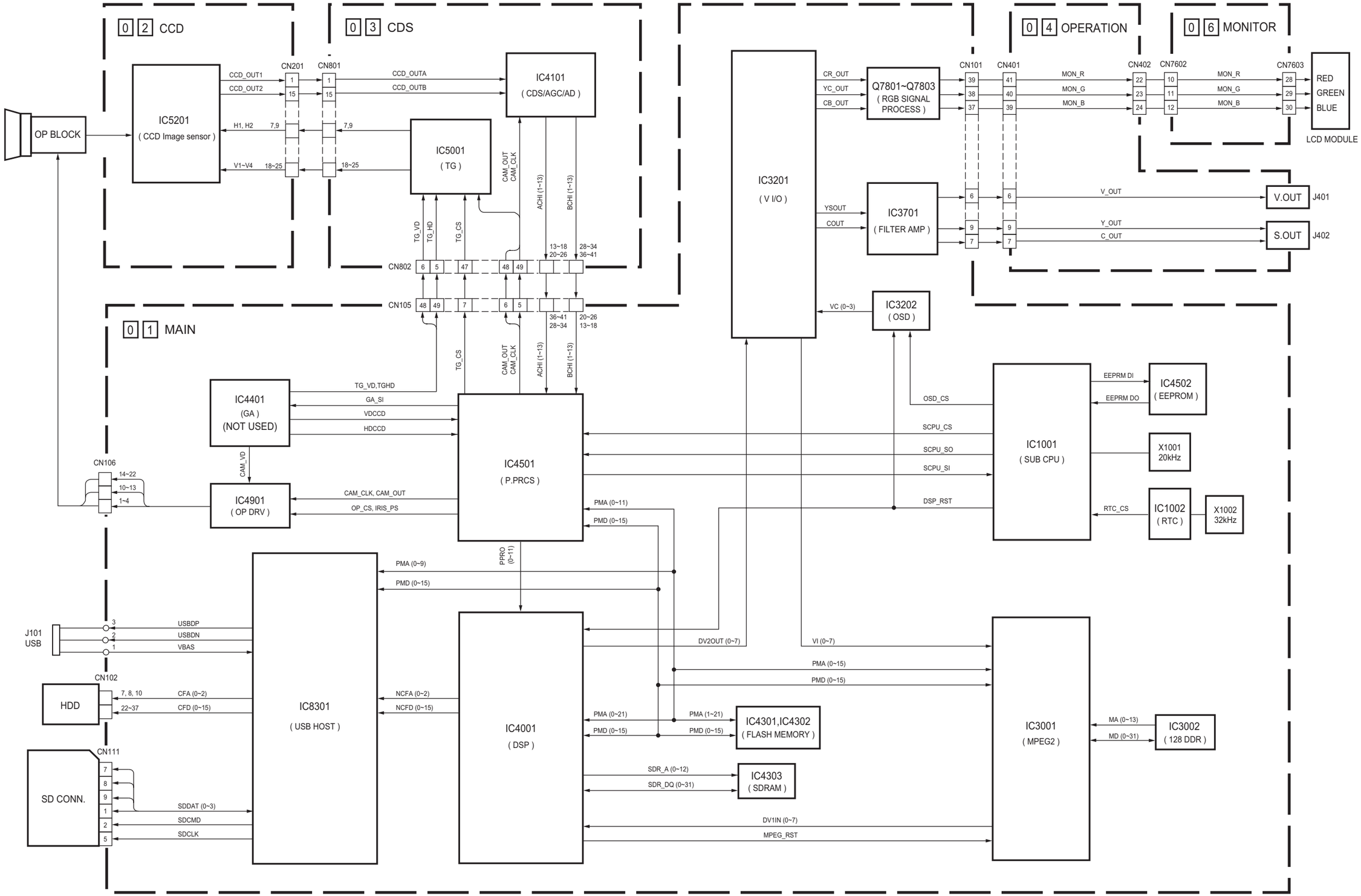
<MONITOR>

MODE PIN NO.	DC
IC7601	
1	3.1
2	0
3	0
Q7702	
1	0
2	2.9
3	3.1
4	3.1
5	0
6	0
Q7703	
1	0.5
2	1.1
3	5.0
4	0.4
5	0
6	1.1

■ POWER SYSTEM BLOCK DIAGRAM



■ VIDEO SYSTEM BLOCK DIAGRAM



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